

# TRANSPORTATION ELEMENT

## Introduction

The purpose of the transportation element is to plan for an integrated multimodal transportation system providing for the circulation of motorized and non-motorized traffic in Miami-Dade County. The element provides a comprehensive approach to transportation system needs by addressing all modes of transportation - traffic circulation, mass transit, aviation and ports.

The Transportation Element is divided into five subelements. The Traffic Circulation Subelement addresses the needs of automobile traffic, bicyclists and pedestrians. The Mass Transit Subelement addresses the need to continue to promote and expand the public transportation system to increase its role as a major component in the County's overall transportation system. The Aviation Subelement addresses the need for continued expansion, development and redevelopment of the County's aviation facilities; and the Port of Miami River and Port of Miami Master Plan Subelements continue to promote maritime business and traditional maritime related shoreline uses on the Miami River, and the expansion needs of the Port of Miami.

The Adopted Components for each of the five subelements separately contain: 1) goals, objectives and policies; 2) monitoring measures; and 3) maps of planned future facilities. The functional subelements are preceded by an overarching goal, objectives and policies that express the County's intent to encourage multi-modalism and consistency between its land use and transportation policies.

*The Miami-Dade Transportation Plan to the Year 2030 (Transportation Plan)*, also referred to as “The Long Range Transportation Plan” (LRTP), is adopted to guide transportation investment in the County for the next 25 years. The *Transportation Plan* includes improvements proposed for roadways, transit, bicycle and pedestrian facilities, greenways and trails. It contains a “Cost-Feasible Plan” that categorizes projects into priority groupings based upon future funding availability. Priority I contains those projects scheduled to be funded through by 2009 and represent funds for improvements as programmed in the “Miami-Dade Transportation Improvement Program 2005-2009”. Priority II projects are scheduled to be funded between 2010 and 2015, and Priority III projects are scheduled to be funded between 2016 and 2020. However, due to the long-range nature of the Priority IV projects, funding is scheduled over a 10-year period (2021 to 2030) and because the Comprehensive Development Master Plan (CDMP) has a horizon year of 2025, exact correspondence with the Priority IV projects in the “Cost-Feasible Plan” is not possible. Since the Priority IV grouping encompasses the CDMP horizon year, the required three-year updates to the “Cost-Feasible Plan” will continually adjust the funding availability for the Priority IV projects as the horizon year advances.

## **GOAL**

**DEVELOP AND MAINTAIN AN INTEGRATED MULTIMODAL TRANSPORTATION SYSTEM IN MIAMI-DADE COUNTY TO MOVE PEOPLE AND GOODS IN A MANNER CONSISTENT WITH OVERALL COUNTYWIDE LAND USE AND ENVIRONMENTAL PROTECTION GOALS.**

### **Objective TE-1**

**Miami-Dade County will provide an integrated multimodal transportation system for the circulation of motorized and non-motorized traffic by enhancing the Comprehensive Development Master Plan and its transportation plans and implementing programs to provide competitive surface transportation mode choice, local surface mode connections at strategic locations, and modal linkages between the airport, seaport, rail and other inter-city and local transportation facilities. These plans and programs shall seek to ensure that, among other objectives, between 2004 and 2010 Miami-Dade Transit boardings will increase at a rate equal to or greater than the rate of resident population growth during this period.**

### **Policies**

- TE-1A. As provided in this section and the Mass Transit Subelement, the County shall promote mass transit alternatives to the personal automobile, such as rapid transit (*i.e.* heavy rail, light rail, and express buses), fixed route bus and paratransit services.
- TE-1B. Miami-Dade County shall continue to maintain programs for optimal development and expansion of the Port of Miami and the Miami-Dade County aviation system, and shall continue to support viable operation and enhancement of the Port of Miami River. The County shall also accommodate and facilitate provision of inter-city and inter-state commuter rail and bus, high-speed intrastate rail, and freight rail services. These activities will be conducted in accordance with the respective subelements of this element and other applicable elements of the CDMP including the Land Use and Capital Improvement Elements.
- TE-1C. When other transportation facility providers' plans are updated, Miami-Dade County shall seek to ensure that those plans provide high quality intermodal connections at optimal transfer points. These should include, but should not be limited to, the intermodal connections currently planned in the other subelements of the Transportation Element including the Port of Miami tunnel, Miami International Airport west-side cargo area access improvements such as the NW 25 Street viaduct, and the Miami Intermodal Center (MIC).

- TE-1D. Within the time-frame of the CDMP, Miami-Dade County will actively pursue development of intermodal facilities where opportunities arise, including, but not limited to:
- Miami Intermodal Center (MIC);
  - Downtown Miami Transportation Center;
  - Northeast Miami-Dade Terminal;
  - Douglas Road Transit Center; and
  - Park-and-Ride Lots, where feasible opportunities present themselves along bus/rail corridors.
- (See Mass Transit Subelement Figures 1 and 2 for planned inter-modal/multimodal transit center locations).
- TE-1E. As provided in the Aviation, Port of Miami River, and The Port of Miami Master Plan Subelements, the County shall promote improved intermodal linkages for the movement of passengers and freight, including the consideration of waterborne transportation. (See Aviation Subelement Policies AV-5A. and AV-5B; Port of Miami River Subelement Objective PMR-2 and Policy PMR-2A; and The Port of Miami Master Plan Subelement Policies PM-8A and PM-8B.)
- TE-1F. Transit-supportive Land Use Element policies including, but not limited to, Urban Center guidelines shall be vigorously implemented in association with planned rapid transit facilities identified in the Transportation Element.

## **Objective TE-2**

**In furtherance of pedestrianism as a mode of transportation encouraged in the planned urban area, by 2008 Miami-Dade County shall enhance its transportation plans, programs and development regulations as necessary to accommodate the safe and convenient movement of pedestrians and non-motorized vehicles, in addition to automobiles and other motorized vehicles.**

### **Policies**

- TE-2A. The County shall continue to promote and assist in the creation of a Countywide system of interconnected designated bicycle ways, and promote the implementation of the *Miami-Dade Bicycle Facilities Plan*.
- TE-2B. By 2008, the County shall develop a comprehensive countywide greenways network providing continuous corridors for travel by pedestrians and non-motorized vehicles incorporating elements of the adopted South Dade Greenway Network Master Plan and the North Dade Greenways Plan.

- TE-2C. In road construction and reconstruction projects, roadway designs shall protect and promote pedestrian comfort, safety and attractiveness in locations where the Land Use Element seeks to promote activity along road frontages, such as in areas planned for community- or neighborhood-serving businesses and all planned Urban Center and transit station locations. Such measures should include, wherever feasible, on-street parking, wide sidewalks, and abundant landscaping at the street edge. Additionally, boulevard section designs should be utilized where appropriate, including central through lanes and frontage lanes for local traffic and parking, separated from the through lanes by landscaped areas, with frequent opportunities for pedestrians to safely cross the through lanes, and right of way to facilitate these designs should be reserved or acquired where necessary. Roadway pedestrian facility considerations shall also be consistent with the policies addressing pedestrianism contained in the Land Use Element.
- TE-2D. Miami-Dade County's top priority for constructing new sidewalks after completion of the "Safe Routes to Schools" program shall be to provide continuous sidewalks along the following: a) existing rapid transit stations and transit centers, b) existing parks and recreation open spaces, c) both sides of all County collector and arterial roadways within 1/4 mile of all existing transit stations and centers, and d) at least one side of County collector and arterial roadways between 1/4 and 1/2 mile of all existing transit stations and centers. All new development and redevelopment in these areas shall be served by these sidewalks. It is the policy of Miami-Dade County that municipalities in the County establish similar priorities for their jurisdictions, and that FDOT do the same with regard to State roads. In all new construction and reconstruction of collector and arterial roads inside the UDB served by Metrobus, sidewalks should be provided along all portions of such roads between bus stops and any existing or planned intersecting residential or community-serving business streets within, at a minimum, 1/4 mile of the bus stops.
- TE-2E. The County shall require accommodation of bicycle travel and pedestrian needs in plans for future arterial and collector road construction, widening or reconstruction projects where designated by the Bicycle Facilities Plan, wherever feasible.
- TE-2F. The County shall consider the use of utility easements and transit or railroad rights-of-way as locations for bicycle ways linking major urban activity centers.
- TE-2G. The County shall encourage inclusion in, and review, all plans and development proposals for provisions to accommodate safe movement of bicycle and pedestrian traffic, and facilities for securing non-motorized vehicles in all new development and redevelopment and shall address this as a consideration in development and site plan review.

### **Objective TE-3**

**As provided in the policies hereinunder, Miami-Dade County shall cooperate with the Metropolitan Planning Organization for the Miami Urbanized Area (MPO) to enhance Miami area planning procedures, methodologies and analytical tools to improve analysis of relationships between transportation facility plans and programs, and local land use plans, development standards and implementing programs.**

#### **Policies**

- TE-3A. Miami-Dade County shall cooperate with, and participate in, activities and initiatives undertaken by the Florida Department of Transportation (FDOT) and the statewide MPO Advisory Committee (MPOAC) to enhance intermodal and land use aspects of transportation plans and planning methods used by the State and the MPOs throughout the state. Toward this end, it is the policy of Miami-Dade County that during preparation of major updates of the Long Range Transportation Plan (LRTP) by the Miami Area MPO, the County will coordinate and work with the MPO, as the MPO has committed by resolution, to better coordinate transportation and land use planning and enhance intermodal qualities of transportation analyses and plans of the MPOs.
- TE-3B. Miami-Dade County, in the manner that financial and technical assistance of the FDOT will enable, shall analyze planned land use patterns and intensities in planned rapid transit station areas and shall identify transportation and land use plan changes needed to improve interrelationships. This analysis shall address, at a minimum, the existing MetroRail corridor, the planned initial segment of the East-West corridor, the planned North corridor, and the South Miami-Dade Busway corridor and its planned extension. This analysis shall identify locations where planned transit facilities are not supported by the planned land use or development intensity<sup>1</sup> with consideration of mitigating benefits of planned transit rider feeders such as major park-and-ride or bus terminal facilities in the corridor. Where such locations are identified, alternative land uses or intensities will be analyzed, and potential land use or transportation plan amendments will be identified. The information produced by this analysis shall be provided to the MPO, the Board of County Commissioners and the directly affected municipalities having comprehensive planning and zoning jurisdiction in the immediate vicinity of these planned transit corridors for their consideration. It is the policy of Miami-Dade County that affected municipalities consider local plan amendments to reflect the findings of this analysis.
- TE-3C. It is the policy of Miami-Dade County to develop all the transportation facilities identified in both the MPO's LRTP and the CDMP Transportation Element as soon as feasible, in accordance with the LRTP phasing program. It is the policy

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<sup>1</sup> Development intensity threshold to be used in this analysis shall be 15 dwelling units per acre and 75 employees per acre for traffic analysis zones with ½ mile of rail transit stations and for ¼ mile around exclusive busway stops.

of the County that the non-cost-feasible projects listed in the MPO's LRTP and the CDMP Transportation Element shall be retained in these plans solely as identified future priorities of the County for which the County shall pursue additional funding, and which shall be advanced into the cost-feasible components of the respective plans at the earliest feasible opportunities. It is, further, the policy of the Board of County Commissioners that, a) non-cost-feasible transportation projects may be advanced into the cost-feasible component of the referenced plans only after demonstration that the project appropriately supports, and is supported by, related services such as transit feeders and/or the type and intensity of planned surrounding land development, and b) the Governing Board of the MPO is urged to support this policy. Only the transportation projects contained in the cost-feasible components of the LRTP and the CDMP shall be considered in the administration of the County's concurrency management program and, after the next update of the CDMP Transportation Element to reflect the next update of the MPO's LRTP, the presentations of future levels of service in the CDMP shall reflect only these facility improvements.

## **Transportation Monitoring Program**

In order to enable the preparation of the periodic Evaluation and Appraisal Report (EAR) required by Section 163.3191, Florida Statutes (F.S.), the Minimum Criteria Rule [Rule 9J-5, Florida Administrative Code (F.A.C.)] requires that local comprehensive plans contain adopted procedures for monitoring and evaluating the Plan and its implementation.

An important part of the implementation of the objectives of the Transportation Element is the establishment of a program for monitoring their progress. The transportation monitoring program consists of the following measures:

**Objective TE-1.** Number of transportation plans prepared and adopted by State, Regional and local governments reviewed during the EAR reporting period; and review and analyze Metrorail and Metromover boardings and compare the boarding rates with the County's population growth rates for the same period.

**Objective TE-2.** Number of bicycle and pedestrian facilities reviewed through site planning and plat reviews, and number of reviews of other transportation improvement plans; and implementation status of the Miami-Dade Bicycle Facilities Plan.

**Objective TE-3.** Number of changes to the procedures, methodology and analytical tools adopted as a result of updates of the MPO's Long Range Transportation Plan; and number of land use changes as a result of coordinating land use and transportation planning.

# TRAFFIC CIRCULATION SUBELEMENT

## Introduction

The purpose of the Traffic Circulation Subelement is to provide an overview of the current and future transportation needs of Miami-Dade County. The Subelement analyzes current roadway capacity and deficiencies in Miami-Dade County, it provides recommendations for improving future highway capacity, and it establishes a goal, objectives, and policies aimed at meeting the future needs.

Miami-Dade County, since 1957, has been a home rule charter county. The Planning and Zoning Department therefore serves as a metropolitan agency, and traffic circulation needs and the goal in this Subelement are presented for the entire County, including the 34 municipalities.

The *Adopted Components* of this Subelement include the Traffic Circulation goal, objectives and policies; maps of future conditions; and a monitoring program for evaluating progress toward Plan implementation.

The 2003 Evaluation and Appraisal Report contains inventory data and analysis of existing and future needs. A summary overview of existing traffic circulation conditions is presented, with special attention to capacity deficiencies and the need for additional capacity improvements. Future roadway needs are reviewed drawing upon the technical studies and recommendations of the Adopted *Miami-Dade Transportation Plan to the Year 2030*. Finally, review of future demand is presented to show the magnitude and the time frame of traffic circulation needs in the County.

The *Miami-Dade Transportation Plan to the Year 2030 (Transportation Plan)*, also referred to as “The Long Range Transportation Plan” (LRTP), is adopted to guide transportation investment in the County for the next 25 years. The *Transportation Plan* includes improvements proposed for roadways, transit, bicycle and pedestrian facilities, greenways and trails. It contains a “Cost-Feasible Plan” that categorizes projects into priority groupings based upon future funding availability. Priority I contains those projects scheduled to be funded through by 2009 and represent funds for improvements as programmed in the “Miami-Dade Transportation Improvement Program 2005-2009”. Priority II projects are scheduled to be funded between 2010 and 2015, and Priority III projects are scheduled to be funded between 2016 and 2020. However, due to the long-range nature of the Priority IV projects, funding is scheduled over a 10-year period (2021 to 2030) and because the Comprehensive Development Master Plan (CDMP) has a horizon year of 2025, exact correspondence with the Priority IV projects in the “Cost-Feasible Plan” is not possible. Since the Priority IV grouping encompasses the CDMP horizon year, the required three-year updates to the “Cost-Feasible Plan” will continually adjust the funding availability for the Priority IV projects as the horizon year advances.

## **GOAL**

**DEVELOP, OPERATE AND MAINTAIN A SAFE, EFFICIENT AND ECONOMICAL TRAFFIC CIRCULATION SYSTEM IN MIAMI-DADE COUNTY THAT PROVIDES EASE OF MOBILITY TO ALL PEOPLE AND FOR ALL GOODS, IS CONSISTENT WITH DESIRED LAND USE PATTERNS, CONSERVES ENERGY, AND PROTECTS THE NATURAL ENVIRONMENT.**

### **Objective TC-1**

**It is desirable that all roadways in Miami-Dade County operate at level of service (LOS) C or better. By the year 2010 no roadways in Miami-Dade County should operate at a level of service lower than the base level of service standard contained herein.**

### **Policies**

TC-1A. Miami-Dade County will continue to update and readopt a Long Range Transportation Plan, as periodically required, that will achieve Traffic Circulation Objective TC-1 above, in a manner consistent with the other objectives of the Comprehensive Development Master Plan (CDMP). Upon completion of each update of the Long Range Transportation Plan, Miami-Dade County shall prepare for submittal, pursuant to Chapter 163, Part II, F.S., proposals to enhance and revise the Traffic Circulation and Mass Transit Subelements of the Transportation Element as warranted by said technical findings and policy proposals, consistent with the goals, objectives and policies of the CDMP.

TC-1B. The minimum acceptable peak period\* operating level of service for all State and County roads in Miami-Dade County outside of the Urban Development Boundary (UDB) identified in the Land Use Element shall be LOS D on State minor arterials and LOS C on all other State roads and on all County roads. The minimum acceptable peak-period LOS for all State and County roads inside the UDB shall be the following:

- 1) Within the Urban Infill Area (UIA)<sup>2</sup>
  - (a) Where no public mass transit service exists, roadways shall operate at or above LOS E.

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\* Peak period means the average of the two highest consecutive hours of traffic volume during a weekday.

Note: LOS will be measured based on the latest edition of the Highway Capacity Manual.

<sup>2</sup> UIA is defined as that part of Miami-Dade County located east of, and including, SR 826 (Palmetto Expressway) and NW/SW 77 Avenue, excluding the area north of SR 826 and west of I-95, and the City of Islandia.



- (b) Where mass transit service having headways of 20 minutes or less is provided within 1/2-mile distance, roadways shall operate at no greater than 120 percent of their capacity.
  - (c) Where extraordinary transit service such as commuter rail or express bus service exists parallel roadways within 1/2 mile shall operate at no greater than 150 percent of their capacity.
- 2) Between the UIA and the UDB
  - (a) Roadways shall operate at no worse than LOS D (90 percent of their capacity) except that State Urban Minor Arterials (SUMAs) may operate at LOS E (100 percent of their capacity);
  - (b) Where public mass transit service exists having headways of 20 minutes or less within 1/2-mile distance, roadways shall operate at or above LOS E;
  - (c) Where extraordinary transit service such as commuter rail or express bus service exists parallel roadways within 1/2 mile shall operate at no greater than 120 percent of roadway capacity.
- 3) Notwithstanding the foregoing, as required in s.163.3180 (10), F.S., the following standards established by rule by the Florida Department of Transportation (FDOT), are adopted by Miami-Dade County as its minimum LOS standards for Florida Intrastate Highway System (FIHS) roadways in Miami-Dade County:
  - (a) Outside the UDB
    - 1. Limited access State highways shall operate at LOS B or better;
    - 2. Controlled access State highways shall operate at LOS C or better for two lane facilities, and LOS B or better for four or more lane facilities; and
    - 3. Constrained or backlogged limited and controlled access state highways operating below LOS B, must be managed to not cause significant degradation.
  - (b) Inside the UDB
    - 1. Limited access State highways shall operate at LOS D or better, except where exclusive through lanes exist, roadways may operate at LOS E.

2. Controlled access State highways shall operate at LOS D or better, except where such roadways are parallel to exclusive transit facilities or are located inside designated transportation concurrency management areas (TCMA's), roadways may operate at LOS E.
3. Constrained or backlogged limited and controlled access State highways operating below the foregoing minimums must be managed to not cause significant deterioration.

TC-1C. The County shall continue to maintain and enhance as necessary, a comprehensive traffic counting system for annually monitoring the level of service on, at a minimum, the County roadway system.

TC-1D. Issuance of all development orders for new development or significant expansions of existing development shall be contingent upon compliance with the Level of Service standards contained in Policy TC-1B, except as otherwise provided in the "Concurrency Management Program" section of the Capital Improvements Element.

TC-1E. The County shall, to the maximum extent feasible, improve the operating efficiency of the existing thoroughfare system and reduce peak hour congestion by encouraging the application of low-cost transportation system management techniques including, but not limited to, improved signal timing, and intersection signing, marking, channelization, and on-street parking restrictions.

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NOTES: Constrained FIHS facilities are roadways that FDOT has determined will not be expanded by the addition of two or more through lanes because of physical, environmental or policy constraints.

Backlogged FIHS facilities are roadways operating below the minimum LOS standards, not constrained, and not programmed for addition of lanes in the first three years of FDOT's adopted work program or the five-year CIE.

For roadways outside the UDB significant degradation means an average annual daily traffic increase in two-way traffic volume of 5 percent, or a 5 percent reduction in operating speed for the peak direction in the 100<sup>th</sup> highest hour. For roadways inside the UDB, roadways parallel to exclusive transit facilities or roadways in transportation concurrency management areas, significant degradation means an average annual daily traffic increase in two-way traffic volume of 10 percent, or a 10 percent reduction in operating speed for the peak direction in the 100 highest hour.

**SUMMARY**  
**MIAMI-DADE COUNTY**  
**TRAFFIC CIRCULATION LEVEL OF SERVICE STANDARD**

**Peak Period\* LOS Standard**  
**Non-FIHS Roadways**

Location	Transit Availability		
	No Transit Service	20 Min. Headway Transit Service Within 1/2 Mile	Extraordinary Transit Service (Commuter Rail or Express Bus)
Outside UDB	LOS D-State Minor Arterials LOS C-County Roads and State Principal Arterials		
Between UIA and UDB	LOS D (90% of Capacity); or LOS E (100% Capacity) on SUMAs	LOS E (100% of Capacity)	120% of Capacity
Inside UIA	LOS E (100% of Capacity)	120% of Capacity	150% of Capacity

**FIHS Roadways**

FIHS Facility	Location				
	Outside UDB	Inside UDB	Roadways Parallel to Exclusive Transit Facilities	Inside Transportation Concurrency Management Areas	Constrained or Backlogged Roadways
Limited Access Facilities	B	D [E]	D [E]	D [E]	Manage
Controlled Access Facilities (Two Lanes)	C	D	E	E	Manage
Controlled Access Facilities (Four or More Lanes)	B	D	E	E	Manage

NOTE: LOS inside of [brackets] applies to general use lanes only when exclusive thru lanes exist.

FIHS= Florida Intrastate Highway System

UIA= Urban Infill Area--Area east of, and including NW/SW 77 Avenue and SR 826 (Palmetto Expressway), excluding the City of Islandia, and excluding the area north of SR 826 and west of I-95.

UDB= Urban Development Boundary

SUMA= State Urban Minor Arterial

\* Peak-period means the average of the two highest consecutive hours of traffic volume during a weekday.

- TC-1F. The County shall implement a transportation demand management (TDM) program to reduce overall peak-hour demand and use of single occupant vehicles (SOV). This program will include such TDM strategies as the following:
- 1) van pooling and employer-based car pooling;
  - 2) employer-based staggered and/or flexible work hours;
  - 3) parking management;
  - 4) telecommunicating;
  - 5) congestion pricing;
  - 6) park and ride lots;
  - 7) high occupancy vehicle lanes;
  - 8) trip reduction ordinances;
  - 9) transportation management associations (TMA's); and
  - 10) subsidies for transit riders.
- TC-1G. Miami-Dade County shall continue to implement procedures and requirements for all development, regardless of size, to contribute its proportionate share of transportation facilities, or funds or land therefore, necessary to accommodate the impact of the proposed development. The County shall periodically review and update impact fee schedules to ensure that all public and marginal costs are appropriately recognized, and that fee structures reflect pertinent geographic (i.e., core vs. fringe area) variability in facility usage.
- TC-1H. In highway and transit planning activities of the County and the Metropolitan Planning Organization (MPO), Miami-Dade County will give highest priority to the funding of necessary capacity improvements to roadways on the Florida Intrastate Highway System (FIHS) as defined in Section 338.001, F.S., and to proximate facilities and services that would serve to relieve congestion on FIHS facilities which are operating above their capacity. Further, the County and the Miami-Dade County MPO shall coordinate with FDOT to develop feasible strategies and mechanisms to minimize local traffic impact on FIHS facilities.
- TC-1I. By 2005, the County will investigate and develop for implementation parking management strategies to promote the land use and transportation objectives of the CDMP to reduce the use of Single Occupant Vehicles (SOVs) and highway congestion and encourage the use of transit and ridesharing. Additionally, parking requirements in the County's zoning regulations will be reviewed to encourage shared and possibly on-street parking in planned Urban Centers, and to moderate parking requirements where transit service exists, and where developments contains complementary use mixes.
- TC-1J. Upon completion of the Countywide Parking Policy Study conducted by the Miami-Dade County MPO, the County shall amend the CDMP Transportation Element as necessary to facilitate implementation of the study's recommendation and to depict planned future major parking facilities in the Traffic Circulation Subelement map series.

- TC-1K. The County shall utilize the Miami-Dade County MPO transportation planning and project review processes to evaluate and implement roadway and transit improvements that will improve access to, and connections between, the County's major aviation, rail and port facilities

## **Objective TC-2**

**Rights-of-way and corridors needed for existing and future transportation facilities will be designated and reserved.**

### **Policies**

- TC-2A. The County shall continue to maintain and enforce the minimum right-of-way requirements as established in the *Public Works Manual* and in Chapter 33, Zoning, *Code of Miami-Dade County*, to ensure Countywide continuity of the thoroughfare system. The County shall review roadway design standards and right-of-way reservations and shall propose changes as may be necessary to better accommodate projected vehicular and non-vehicular movement in the corridors and design features recommended in the Transportation and Land Use Elements
- TC-2B. The County shall require the dedication of the appropriate share of all necessary rights-of-way from all developments at the time of development.
- TC-2C. Except for those section, half-section and quarter-section line rights-of-way within the portion of the Northwest Wellfield Protection Area located west of the Homestead Extension of the Florida Turnpike, advance rights-of-way shall be reserved or acquired, where necessary, for future transportation improvements identified in the Traffic Circulation and Mass Transit Sub-Elements.
- TC-2D. The section line, half-section line, and quarter-section line road system should form a continuous network within developed areas, interrupted only when it would destroy the integrity of a neighborhood or development. The County shall not approve vacation of zoned rights-of-way unless it is determined that the right-of-way is not required for present or future public use, or unless the zoned right-of-way is within that portion of the Northwest Wellfield Protection Area located west of the Homestead Extension of the Florida Turnpike, and the CDMP Guidelines for Urban Form will be reflected.

## **Objective TC-3**

**The County's transportation system will emphasize safe and efficient management of traffic flow.**

## **Policies**

- TC-3A. The County shall continue to assure provision of an adequate, properly designed and safe system for controlling vehicular accessibility to major thoroughfares through adopted design standards and procedures, which at a minimum address:
- 1) Adequate storage and turning bays;
  - 2) Spacing and design of median openings and curb cuts;
  - 3) Provision of service roads;
  - 4) Driveway access and spacing and;
  - 5) Traffic operations.
- TC-3B. The County will continue to monitor high accident-frequency locations on the County highway system to identify any design improvements, which may alleviate hazardous conditions and incorporate such improvements into the Transportation Improvement Program (TIP).

## **Objective TC-4**

**The Traffic Circulation Subelement will continue to be coordinated with the goals, objectives and policies of the Land Use Element, including the land uses, Urban Development Boundary and Urban Expansion Area designated on the Land Use Plan map, and with the goals, objectives and policies of all other Elements of the CDMP.**

## **Policies**

- TC-4A. The County shall maintain the Traffic Circulation Subelement consistent with the objectives and policies of the CDMP Land Use Element.
- TC-4B. The adopted Land Use Plan map shall be used to guide the planning of future transportation corridors and facilities to ensure the proper coordination between transportation planning and future development patterns.
- TC-4C. Miami-Dade County's priority in construction, maintenance, and reconstruction of roadways, and the allocation of financial resources, shall be given first to serve the area within the Urban Development Boundary of the Land Use Plan map. Second priority in transportation allocations shall support the staged development of the urbanizing portions of the County within the Urban Expansion Area. Transportation improvements which encourage development in Agriculture and Open Land areas shall be avoided, except for those improvements which are necessary for public safety and which serve the localized needs of these non-urban areas. Areas designated Environmental Protection shall be particularly avoided.
- TC-4D. Miami-Dade County shall set as a priority in its transportation planning program the provision of facilities and services to accomplish the timely evacuation of Miami-Dade County's barrier islands in advance of approaching hurricanes.

- TC-4E. Notwithstanding the designation of Krome Avenue as a Major Roadway on the CDMP Land Use Plan Map or as a four-lane roadway in the Traffic Circulation Subelement, no construction associated with the four-laning, or other capacity improvement, of Krome Avenue outside the Urban Development Boundary shall occur until FDOT has prepared, and the Board of County Commissioners has adopted, a detailed binding access control plan for the Krome Avenue corridor. This plan should emphasize access to properties fronting Krome Avenue primarily through alternative street locations<sup>3</sup>.

### **Objective TC-5**

**The traffic circulation system will protect community and neighborhood integrity.**

#### **Policies**

- TC-5A. The County will conserve and protect the character of neighborhoods from the avoidable intrusion of major thoroughfares and expressways.
- TC-5B. Major thoroughfares and intersections should be located and designed in a manner which would not tend to sever or fragment land which is, or could otherwise be, developed as a well-defined neighborhood.
- TC-5C. The County shall discourage through traffic in neighborhoods by adequately accommodating through traffic demands on arterial roadways.

### **Objective TC-6**

**Plan and develop a transportation system that preserves environmentally sensitive areas, conserves energy and natural resources and promotes community aesthetic values.**

#### **Policies**

- TC-6A. The County shall avoid transportation improvements which encourage or subsidize increased development in coastal high hazard areas or environmentally sensitive areas identified in the Coastal Management and Conservation Elements.
- TC-6B. Land access interchanges shall not be placed or constructed in a manner that would provide access to environmental protection areas or other areas to be conserved in order to prevent undue pressure for development of such areas.

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<sup>3</sup> Policy on appeal, not yet applicable.  
October 2001 Cycle, Ordinance Number 02-198, October 10, 2002.

- TC-6C. If no feasible alternative exists, needed transportation facilities may traverse environmental protection or conservation areas, however such access should be limited and design techniques should be used to minimize the negative impact upon the natural systems.
- TC-6D. New roadways shall be designed to prevent and control soil erosion, minimize clearing and grubbing operations, minimize storm runoff, and avoid unnecessary changes in drainage patterns.
- TC-6E. The County shall pursue and support transportation programs (e.g., rapid transit, express buses, high occupancy vehicles [HOV], bikeways) that will help to maintain or provide necessary improvement in air quality and which help conserve energy.
- TC-6F. Design new roadways in such a manner as to make them compatible with the surrounding environment, complement adjacent development and provide aesthetically pleasing visual experience to the user and the adjacent areas.
- TC-6G. Require adequate arterial road dedications to allow for linear landscaped open space adjacent to two-lane roads and for medians as well as adjacent landscaped margins for four-lane roads.

## **Objective TC-7**

**Miami-Dade County's Traffic Circulation Subelement, and the plans and programs of the State, region and local jurisdictions, will continue to be coordinated.**

### **Policies**

- TC-7A. Miami-Dade County shall annually review subsequent Florida Department of Transportation (FDOT) Five-Year work programs to ensure that they remain consistent with and further the Traffic Circulation Subelement and other Elements of Miami-Dade County's CDMP.
- TC-7B. Miami-Dade County shall continue to coordinate local transportation planning of the Metropolitan Planning Organization (MPO) for the Miami Urbanized Area, and specifically the MPO's development of the Long Range Transportation Plan Update, with the CDMP transportation planning process.
- TC-7C. The County shall review the compatibility of the Traffic Circulation Subelement and coordinate it with the traffic circulation plans and programs of the municipalities in Miami-Dade County, adjacent counties, the South Florida Regional Transportation Authority, and the South Florida Regional Planning Council and shall cooperate in maintaining adequate inter-regional mobility.



TC-7D. The County shall promote areawide coordination with local governments and regional and state agencies in the implementation of the Transportation Element, through mechanisms such as established by the Miami-Dade County MPO, FDOT Districts 4 and 6, the South Florida Regional Transportation Authority, and the South Florida Regional Planning Council.

### **Future Traffic Circulation Map Series**

Figures 1, 3, 4 and 5 in the future traffic circulation map series present the planned highway network as adopted in the MPO's Long Range Transportation Cost Feasible Plan. The following is a series of future traffic circulation maps, which present the long-term transportation network proposed for the Year 2025. Figure 1, Planned Year 2025 Roadway Network, depicts the lane requirements for the Year 2025. It is the purpose of the map to identify generally, where future throughways will be located to serve future travel demand.

Figure 2, Roadway Functional Classification - 2004 indicates the existing role that various roadways serve. The classification is established by the Florida Department of Transportation in accordance with State criteria and formulae. The classification of all State and County roadways is periodically updated by the State to reflect changing conditions. Accordingly, Figure 2 will be subject to amendment from time to time to reflect those updates.

Figure 3, Roadway Functional Classification - 2025, indicates the roadway classification for State and County facilities on the 2025 network. The classification of roadways indicate the role of the various roadways in meeting the future mobility needs and serving land uses as well as the jurisdictional responsibility. The functional classification of most arterial highways and expressways is not projected to change through time. Only in certain instances are existing roadways anticipated for reclassification. This occurs where growth is planned and travel demand is projected to increase, thus causing these roads to function differently. All roads on the State highway system have been classified as arterials, and all roads on the County highway system have been classified as minor arterials or collectors. All limited access facilities for the year 2025 are shown in Figure 4. Limited access facilities include all freeways and expressways in Miami-Dade County.

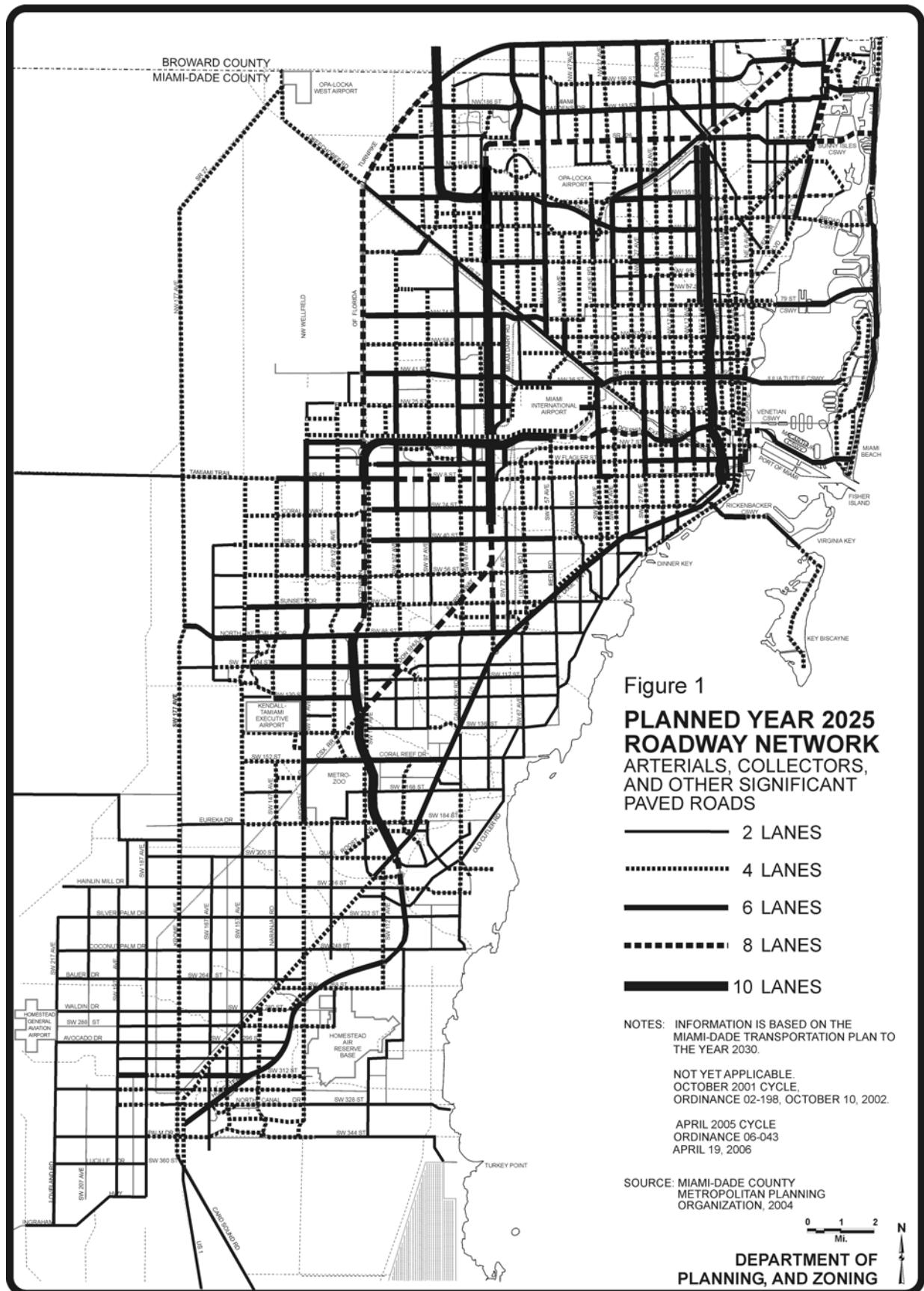
Figure 5, Planned Roadway Network Level of Service - 2025, illustrates the projected levels of service for the Planned Year 2025 roadway network. Figure 6, Planned Non-Motorized Transportation Network - 2025, depicts the planned non-motorized network consisting of on- and off-road bicycle facilities and multi-use trails; Figure 6 reflects the recommended facilities and improvements of the adopted Miami-Dade Bicycle Facilities Plan. Figure 7, Designated Evacuation Routes - 2025, identifies the County's designated local and regional transportation facilities critical to the evacuation of the coastal population. Figure 8, Freight Lines - 2025, depicts future freight lines throughout the County.

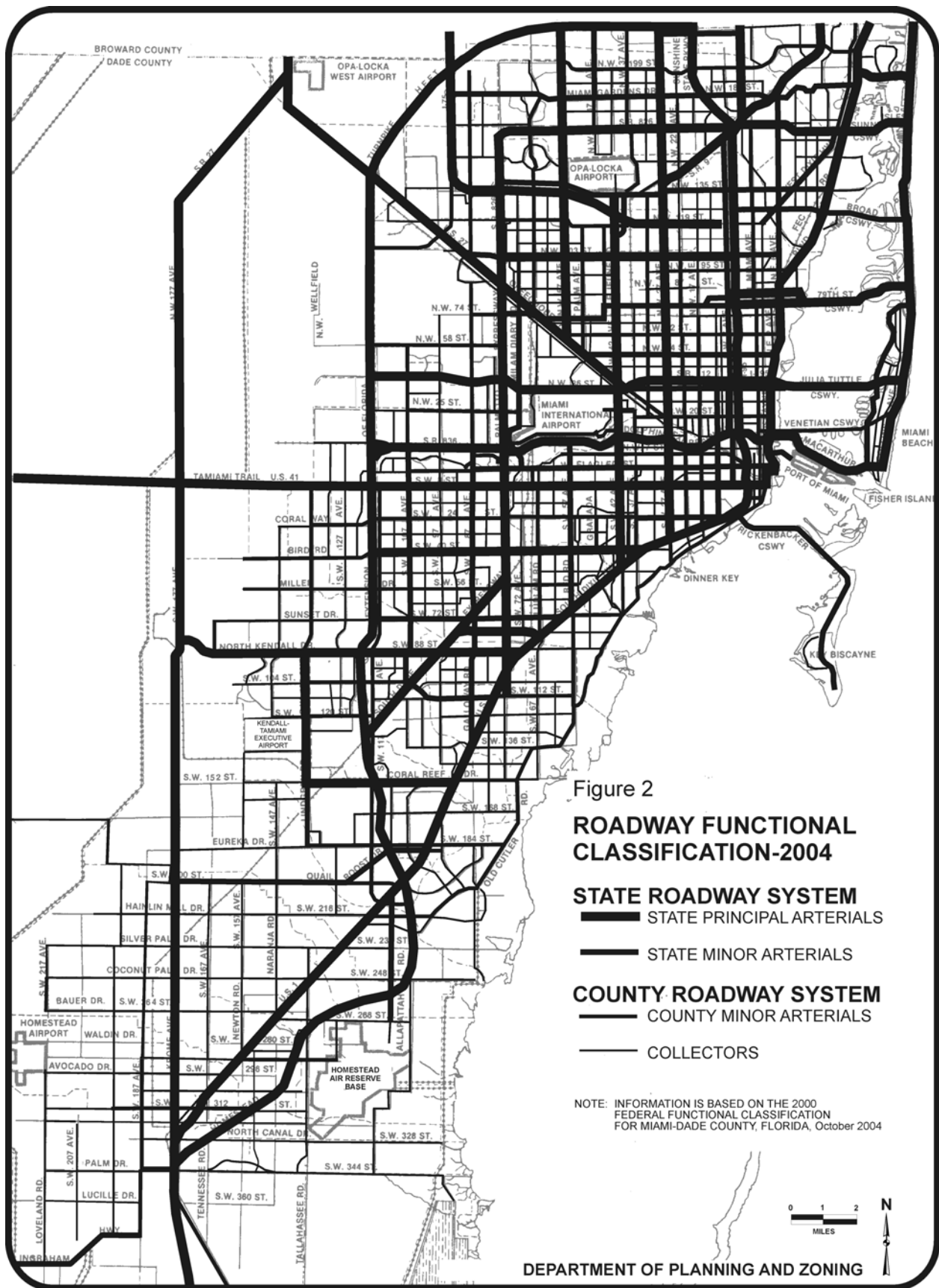
The Metropolitan Planning Organization (MPO), which coordinates all transportation planning for Miami-Dade County, is responsible for periodically updating the MPO's Long Range Transportation Plan. It is anticipated that the future traffic circulation network included

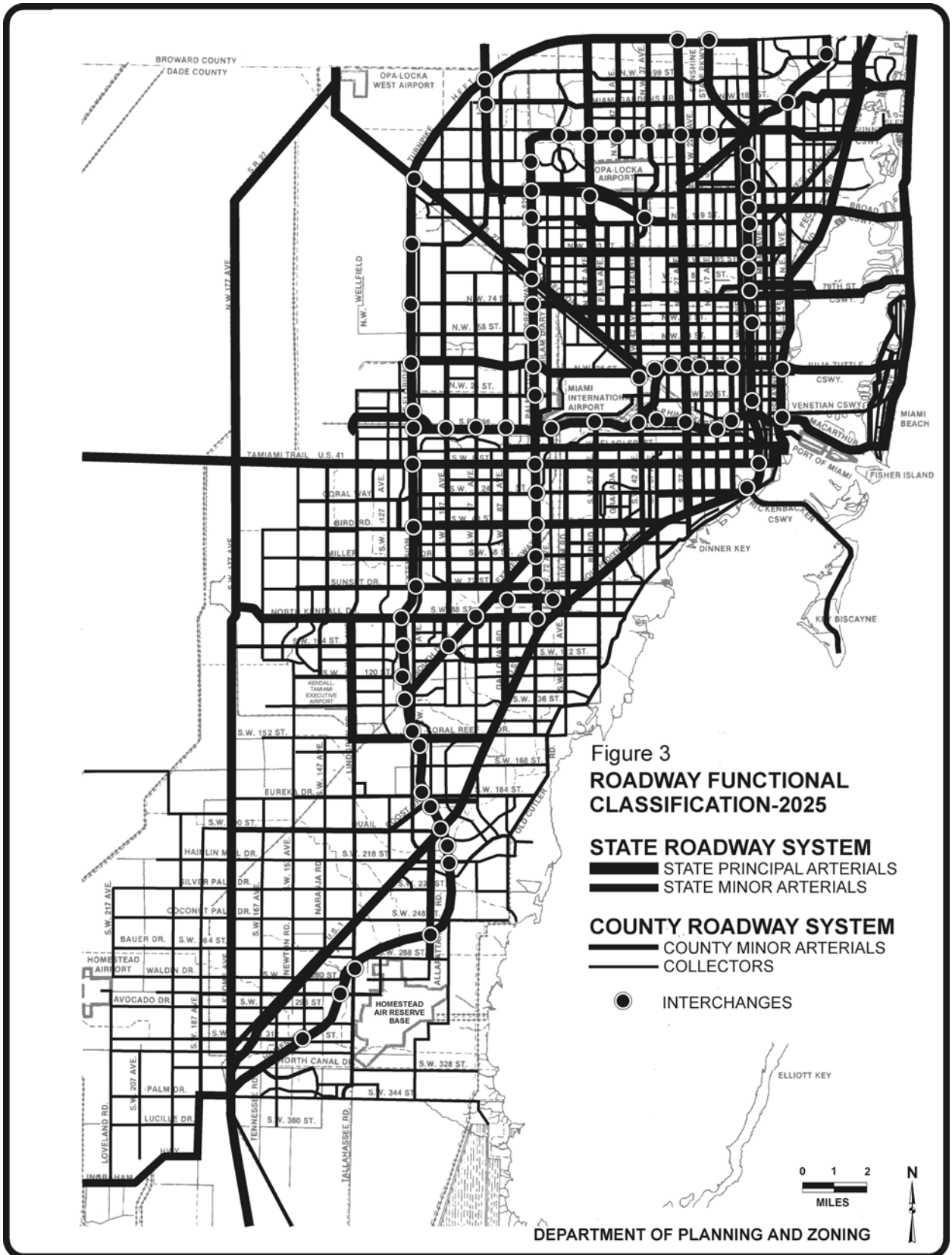
in the Transportation Element will be adjusted during future plan amendment cycles to reflect the findings of that planning activity, in keeping with the goals, objectives and policies of the CDMP.

The proposed transportation network is expected to evolve incrementally over the next twenty years. The first five-year components are based on the current adopted Transportation Improvement Program. Improvements that are the County's responsibility are listed in the Capital Improvements Element. The remainder of improvements are projected for construction between 2010 and 2025; the phasing of all improvement projects are listed in the adopted MPO's Long Range Transportation Plan.

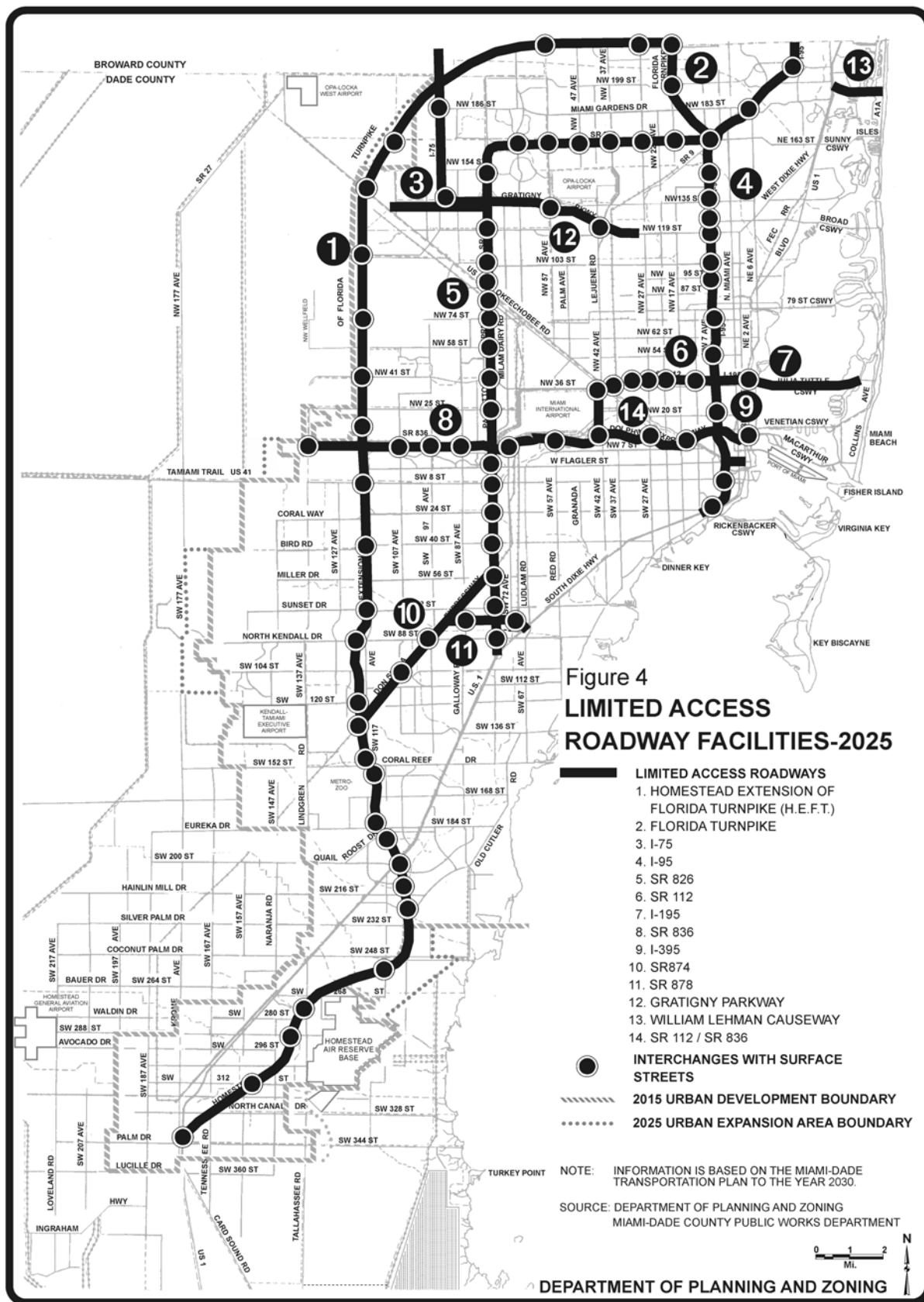
Roadway alignments shown in the traffic circulation map series are general indicators of facility location. Specific alignments will be determined through detailed transportation planning, development review processes, subdivision platting, and highway design and engineering studies.

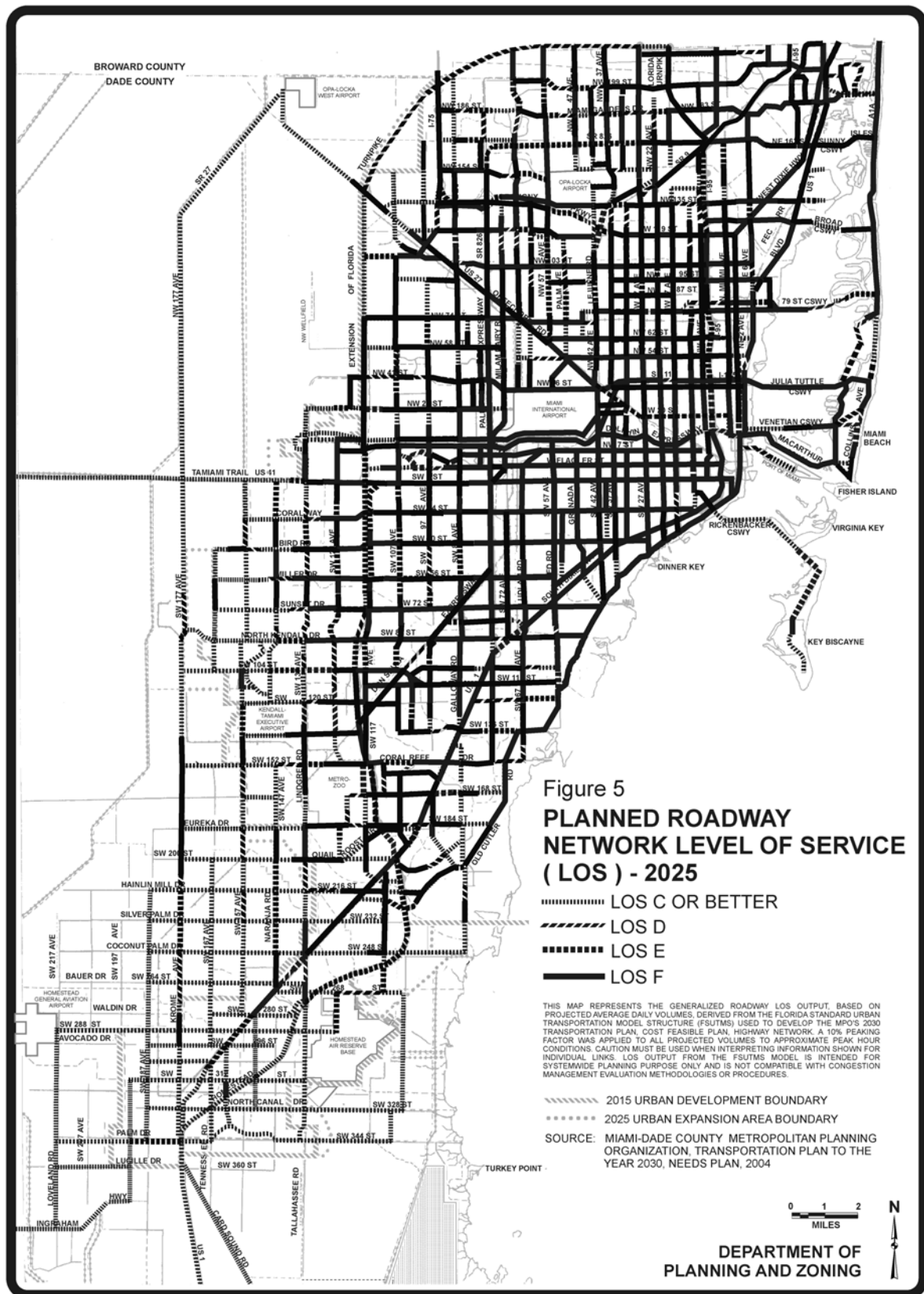


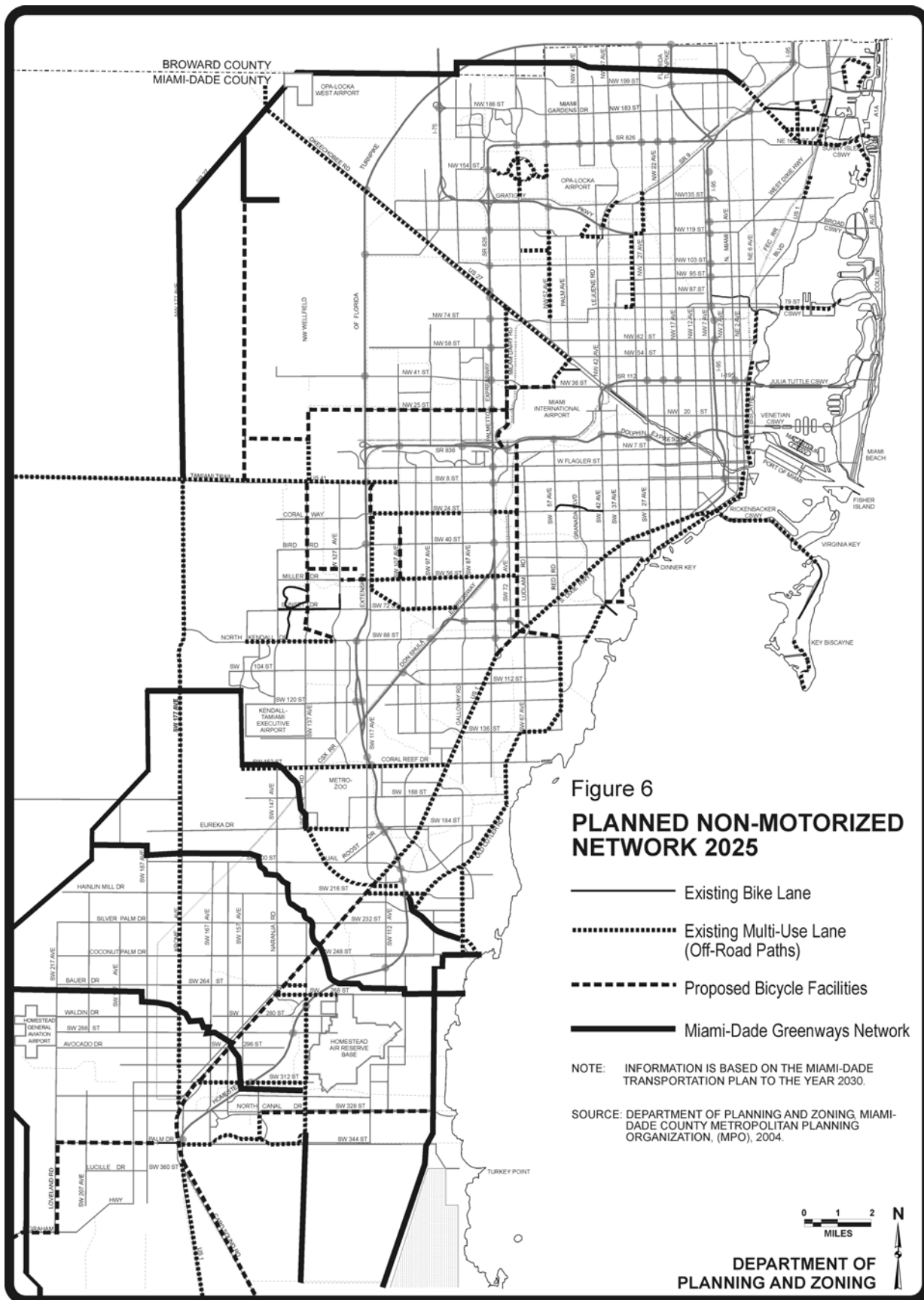




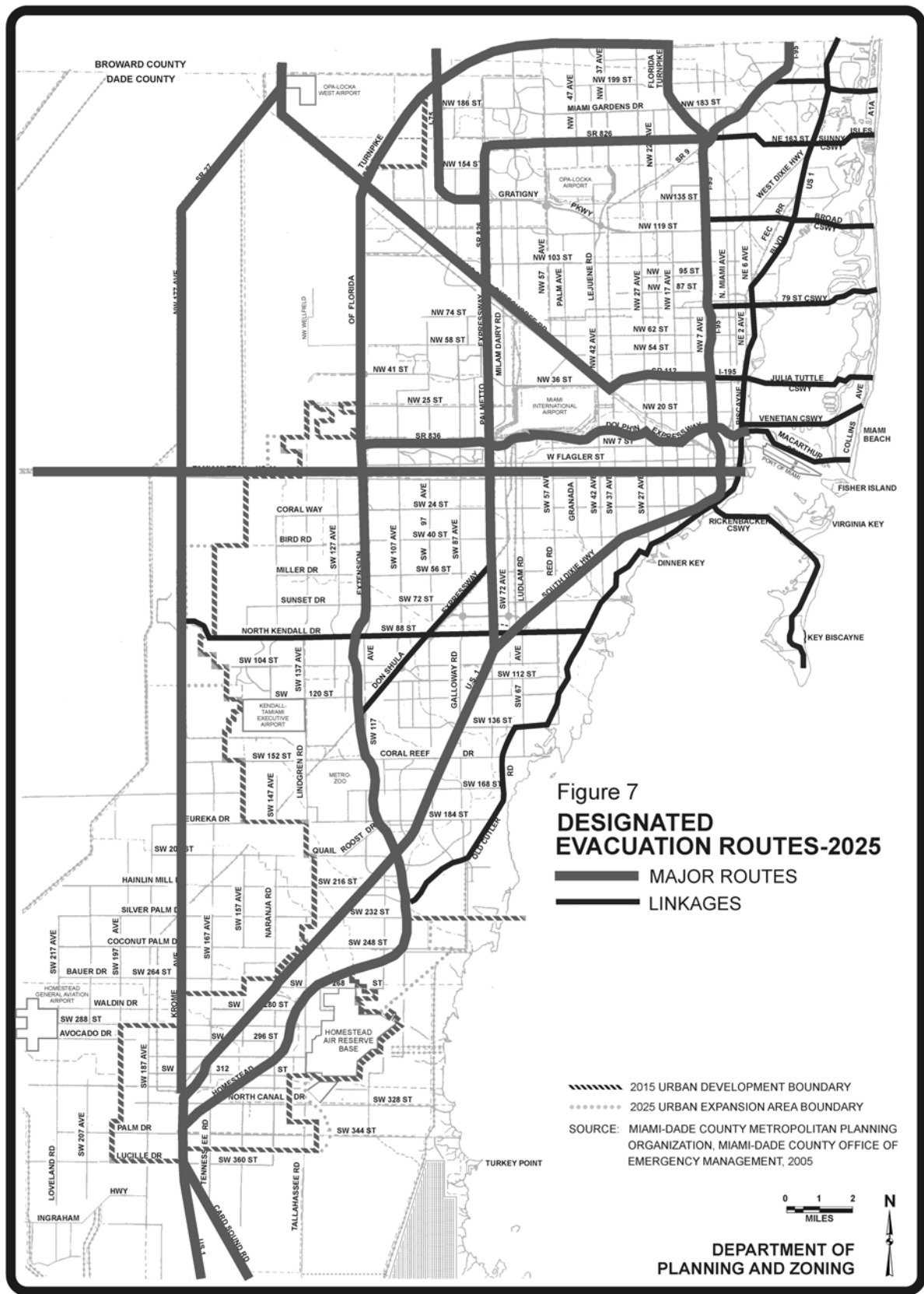
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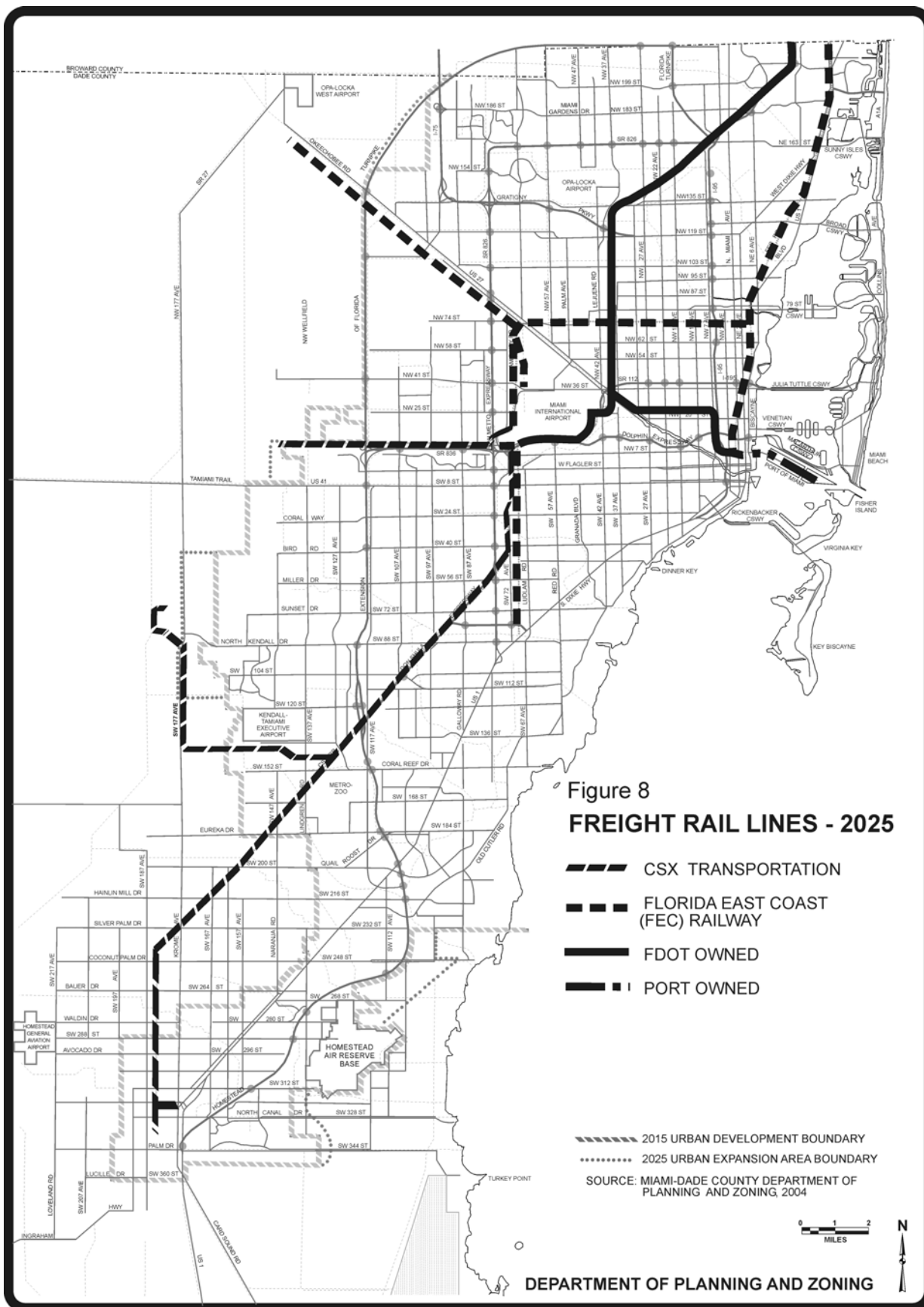












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## **Monitoring Program**

In order to enable the preparation of the periodic Evaluation and Appraisal Report (EAR) as required by Section 163.3191, *Florida Statutes* (F.S.), the Minimum Criteria Rule (Rule 9J-5, *Florida Administrative Code* [F.A.C.]) requires that local comprehensive plans contain adopted procedures for monitoring and evaluating the Plan and its implementation (Sections 9J-5.005[1][c][5], and 9J-5.005[7], F.A.C). In addition, successful implementation of level of service standards and requirements that services be available at the time of development, also require the maintenance or enhancement of monitoring and reporting programs. This section outlines the substantive elements of Miami-Dade County's monitoring program pertinent to the objectives, policies and parameters referenced in this Subelement.

The administrative requirements for monitoring and preparation of the EAR as outlined in Section 9J-5.005[7], F.A.C. are not repeated here. They are outlined only in the Land Use Element to avoid redundancy. The reader is referred to that Element for a summary of those procedural requirements.

### **Monitoring Achievement of Traffic Circulation Objectives**

The following measures will be used to monitor progress and assess achievement of the various objectives contained in the Traffic Circulation Subelement for the Evaluation and Appraisal Report (EAR):

**Objective TC-1.** Attainment of adopted traffic circulation level of service standards.

**Objective TC-2.** Enforcement of minimum right-of-way requirements established in Chapter 33 of the *Code of Miami-Dade County* and *Public Works Manual* either through acquisition or dedication.

**Objective TC-3.** Enforcement of adopted roadway design standards and procedures in the *Public Works Manual* during the review of site plans and plats of proposed developments. Identify high accident-frequency locations and recommend remedial actions to alleviate hazardous conditions based on information provided by the Miami-Dade Police Department Data Systems Bureau.

**Objective TC-4.** Quantify the number of Element amendments revised for consistency with the goals, objectives and policies of the Land Use Element, including the land uses, Urban Development Boundary and Urban Expansion Area designated on the Land Use Plan map, and with the goals, objectives and policies of all other Elements of the CDMP.

**Objective TC-5.** Quantify the number of reviews processed for proposed roadway construction improvements, provided by oversight committees for the protection of community and neighborhood integrity.

**Objective TC-6.** Number of transportation demand management (TDM) and transportation system management (TSM) programs implemented, number of environmental reviews conducted for roadway construction and reconstruction projects, and number of arterial landscaping improvements completed.

**Objective TC-7.** Quantify the number of reviews completed on various plans and programs of FDOT, MPO, and where appropriate, adjacent counties, and annually verify the consistency of programmed improvements for implementation in the TIP with the CDMP.

# MASS TRANSIT SUBELEMENT

## Introduction

The purpose of the Mass Transit Subelement is to provide a basis for the development of mass transit facilities as a major component of the overall transportation system in Miami-Dade County to enhance mobility. It is recognized that the recommended highway improvements in the Traffic Circulation Subelement must be complemented with transit improvements in order to achieve a balanced transportation system through the year 2025.

The *Adopted Components* of this Subelement contain the Mass Transit Goal, Objectives and Policies, a series of mass transit maps showing planned future facilities and service areas, and procedures for monitoring and evaluating conditions. The various objectives and policies emphasize the maintenance and development of transit services to support the staging and phasing of designated future land use patterns consistent with the Land Use Element.

The Adopted 2003 Evaluation and Appraisal Report (EAR) contains information of the transit services currently provided, e.g. Metrobus, Metrorail, Metromover, and paratransit services, with a brief overview of how they operate and relate to each other.

## GOAL

**MAINTAIN, OPERATE AND DEVELOP A MASS TRANSIT SYSTEM IN MIAMI-DADE COUNTY THAT PROVIDES EFFICIENT, CONVENIENT, ACCESSIBLE, AND AFFORDABLE SERVICE TO ALL RESIDENTS AND TOURISTS.**

## Objective MT-1

**By the year 2007, the mass transit system shall operate at a level of service no lower than the standard contained herein.**

## Policies

MT-1A. The minimum peak-hour mass transit level-of-service shall be that all areas within the Urban Development Boundary (UDB) of the Land Use Plan (LUP) which have a combined resident and work force population of more than 10,000 persons per square mile shall be provided with public transit service having 30-minute headways and an average route spacing of one mile provided that:

- 1) The average combined population and employment density along the corridor between the existing transit network and the area of expansion exceeds 4,000 per square mile, and the corridor is 0.5 miles on either side of any necessary new routes or route extensions to the area of expansion;

- 2) It is estimated that there is sufficient demand to warrant the service;
- 3) The service is economically feasible; and
- 4) The expansion of transit service into new areas is not provided at the detriment of existing or planned services in higher density areas with greater need.

MT-1B. Issuance of all development orders for new development or significant expansions of existing development shall be contingent upon compliance with the Level of Service standard contained in Policy MT-1A.

MT-1C. Miami-Dade County shall monitor and review transit system compliance with adopted Level of Service standards annually.

MT-1D. Miami-Dade County shall adopt, and update annually, a 5-year Transit Development Program to address transit needs consistent with adopted Level of Service policies and transit planning guidelines.

## **Objective MT-2**

**Coordinate the provision of efficient transit service and facilities with the location and intensity of designated future land use patterns as identified on the Land Use Plan Map, and the goal, objectives and policies of the Land Use Element.**

### **Policies**

MT-2A. Transit system improvements shall be coordinated with, and support the staging and shaping of development as planned in the Land Use Element, through Miami-Dade County's transportation planning process.

MT-2B. The area surrounding future rapid transit stations not yet sited and depicted on the Land Use Plan map shall be designed and developed, at a minimum, as community urban centers, containing land use and development designs that promote transit use as defined in the Land Use Element.

MT-2C. Priority in transit system improvements will be balanced between the existing service area, and future traffic generators and attractors within the Urban Development Boundary of the Land Use Plan Map.

## **Objective MT-3**

**Provide a sound funding base utilizing public and private sources that will assure maintenance of existing service operations and timely implementation of the needed transportation improvement projects and services.**

## **Policies**

- MT-3A. Miami-Dade County shall strive to establish, through legislative or electoral approval or other means, a dedicated source of revenue that will support current and future transit operations. Sources to be considered may include: a sales tax; levies on motor fuels, motor vehicles, and parking facilities through special benefit assessments; transit impact fees; joint development; and advertising and concessions proposals.
- MT-3B. Any transit plans Miami-Dade County develops, now and in the future, shall be fiscally sound.

## **Objective MT-4**

**Provide convenient, accessible and affordable mass transit services and facilities.**

## **Policies**

- MT-4A. Miami-Dade County, with private sector assistance, shall provide mass transit service appropriate for the mix and intensity of development of urban centers identified in the Land Use Element.
- MT-4B. Miami-Dade County, with appropriate private sector contributions shall provide a network of regular and/or special services to facilitate access to major centers of employment, commercial, medical, educational, governmental, and recreational activity.
- MT-4C. Miami-Dade County, with assistance from Florida Department of Transportation (FDOT), shall provide service that is competitive with automobile travel in terms of reliability and overall travel time and cost.

## **Objective MT-5**

**Provide equitable transportation services to all groups in the metropolitan population, including the special transportation needs of the elderly, persons with disabilities, low income and other transit dependent persons.**

## **Policies**

- MT-5A. At a minimum, Miami-Dade County shall provide equitable transportation services in accordance with Federal Transit Administration (FTA) Title VI Civil Rights requirements.
- MT-5B. At a minimum, Miami-Dade County shall continue to provide special transportation services in compliance with the service criteria and funding specifications of Federally mandated American with Disabilities Act of 1990 (ADA) regulations for persons with disabilities.

- MT-5C. At a minimum, Miami-Dade County shall continue to provide cost effective and coordinated mobility to transportation disadvantaged persons by utilizing both the conventional transit system and complementary paratransit service, when necessary and appropriate, in compliance with State mandated regulations of Chapter 427, Florida Statutes for the transportation disadvantaged, and shall revise and update as required the Transportation Disadvantaged Service Plan.
- MT-5D. The County shall promote increased affordable housing development opportunities within proximity to areas served by mass transit.

### **Objective MT-6**

**Continue to coordinate Miami-Dade County's Mass Transit Subelement, and the plans and programs of the State, region and local jurisdictions.**

#### **Policies**

- MT-6A. Miami-Dade County shall annually review subsequent FDOT 5-Year Work Programs to ensure that they remain consistent with, and further, the Mass Transit Subelement and other elements of Miami-Dade County's Comprehensive Development Master Plan (CDMP).
- MT-6B. Miami-Dade County shall coordinate with FDOT in its efforts to develop intrastate transit systems, including regional transit systems and a publicly or privately financed high speed intrastate rail system linking Tampa, Orlando and Miami, and shall support efforts to create a statewide rail network to improve inter-regional and intermodal linkages serving Miami-Dade County.
- MT-6C. Miami-Dade County shall continue to coordinate mass transit planning with the plans and programs of the Metropolitan Planning Organization (MPO).
- MT-6D. Where appropriate, Miami-Dade County shall coordinate its mass transit plans and programs with those of adjacent counties to ensure regional mobility in major travel corridors.
- MT-6E. Miami-Dade County shall support the efforts of the South Florida Regional Transportation Authority.

### **Objective MT-7**

**Initiate, by 2007, protection strategies for Mass Transit rights-of-way and exclusive transit corridors.**



## **Policies**

- MT-7A. Upon the completion of periodic updates of the MPO Long Range Transportation Plan, Miami-Dade County shall prepare proposals to enhance and revise the Mass Transit Subelement as warranted by the findings and recommendations in such updates, consistent with the goals, objectives and policies of the CDMP.
- MT-7B. Miami-Dade County shall investigate and adopt strategies for preservation of planned mass transit rights-of-way and exclusive corridors, including consideration of railroad and utility rights-of-way which may be appropriate or cost effective in the construction of rapid transit lines, express bus lanes or high-occupancy vehicle (HOV) lanes.
- MT-7C. Miami-Dade County will include provision for high capacity transit modes in planned highway improvements in congested urban corridors.

## **Objective MT-8**

**Encourage ease of transfer between mass transit and all other modes, where it improves the functioning of the transportation network.**

## **Policies**

- MT-8A. Mass transit facilities shall incorporate provisions to enhance ease of transfer with other modes (e.g., park-ride garages and lots, bicycle lockers and racks, pedestrian walkways, taxi and jitney stands).
- MT-8B. In the planning and design of rapid transit sites and stations and transit centers, high priority shall be given to providing a safe, attractive and comfortable environment for pedestrians and transit users; such amenities shall include weather protection, ample paved walkways, sidewalks, lighting, and landscaping, and ancillary uses that provide conveniences to transit patrons such as cafes, news stands and sundries sales.
- MT-8C. In the siting of transit stations in future rapid transit corridors, major consideration will be given to the opportunities for joint development and/or redevelopment of prospective stations sites, and adjacent neighborhoods, offered by property owners and prospective developers.
- MT-8D. Miami-Dade County shall continue its efforts to provide parking facilities for express bus routes involving non-stop and limited stop services to major activity centers and the rapid transit system, and for local bus services.
- MT-8E. Highway improvements shall be designed to include provisions for the location of bus turnout bays, bus shelters, HOV lanes, and other associated facilities to accommodate mass transit services.

## **Future Mass Transit Map Series**

The following series of future mass transit maps presents the general location of proposed transit service areas, terminal or stations, and exclusive transit corridors by transit mode for the year 2025. When paired with recommended highway and pathways improvements in the Traffic Circulation Subelement, a balanced transportation system is provided to meet the future mobility needs of Miami-Dade County. An additional map is provided indicating major traffic generators and attractors based on the proposed 2015-2025 Land Use Plan map. Rapid transit alignments shown on the following map series generally depict planned facility locations. Specific alignments will be selected and may be modified through detailed federally and State regulated transportation planning, design and engineering processes.

Transit Centers, such as Metrobus terminals, rapid transit stations, and transit transfer facilities, are also depicted on the future mass transit map series. These centers are locations where several routes or lines, or different modes, converge. They are designed to handle the movement of transit vehicles and the boarding, alighting and transferring of passengers between transit routes, lines or transit modes.

Figure 1 illustrates the existing Metrobus fixed route service area and those areas that may have the potential for future Metrobus service in the years 2015 and 2025 based on projected population and employment densities and future land use patterns. Potential service to these areas would be contingent upon conformance with the goal, objectives and policies of the Mass Transit Subelement.

Proposed rapid transit corridors are shown in Figure 2. These corridors include:

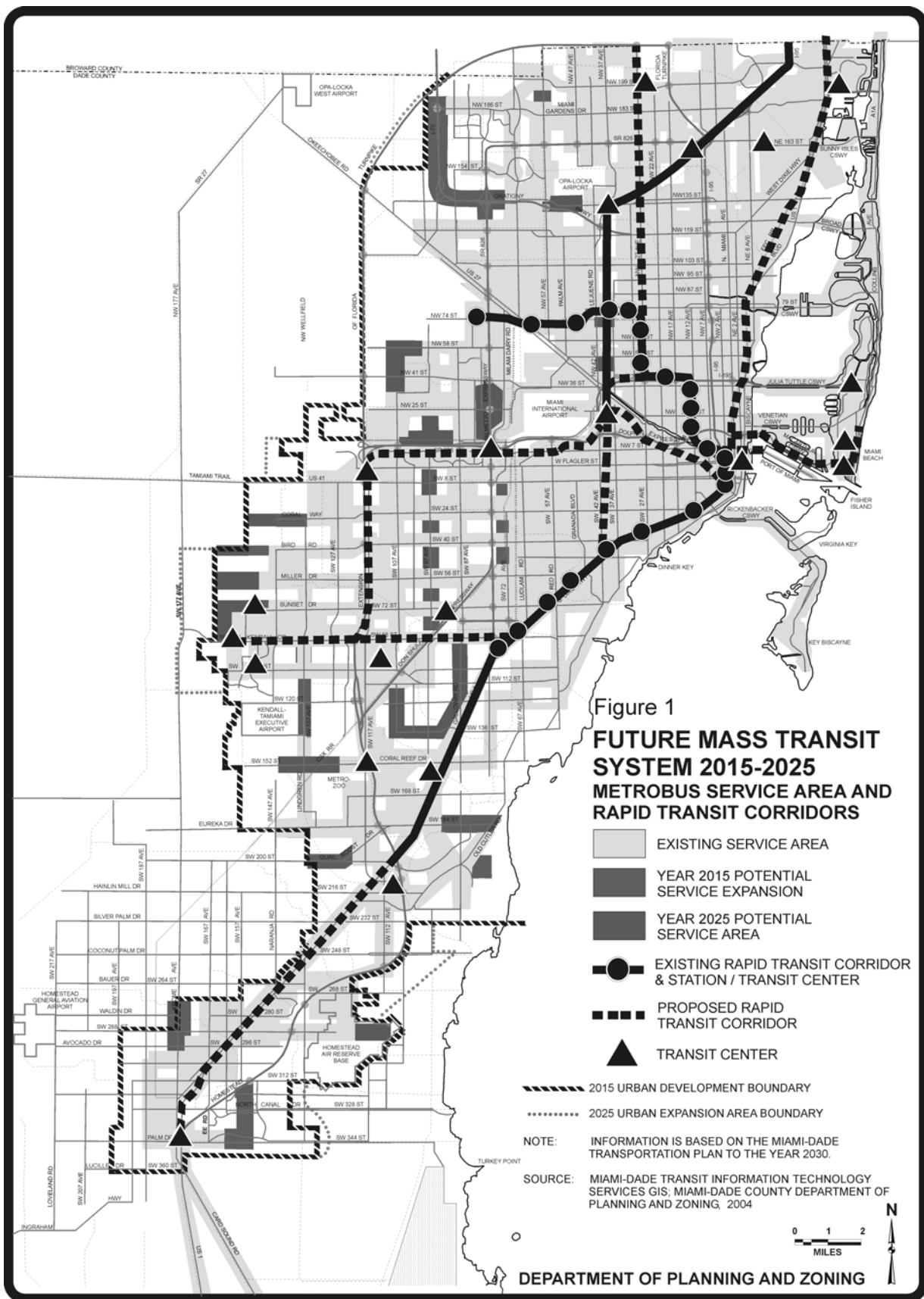
1. The east-west corridor from the Port of Miami, through downtown Miami and the Miami Intermodal Center (MIC) at Miami International Airport (MIA), to Florida International University (FIU);
2. The Earlington Heights Station Connector to the MIC;
3. The North line from Dr. Martin Luther King, Jr. Metrorail Station to the Broward County line;
4. The Northeast line from downtown Miami to Aventura;
5. Baylink from downtown Miami to Miami Beach; and,
6. Corridors connecting the Kendall area:
  - (a) Northward to FIU
  - (b) Southwest from Dadeland to Florida City;
  - (c) West from Dadeland along Kendall Drive
  - (d) Corridor South from the MIC to Douglas Station.

Also, the Tri-County commuter rail line operated by the SFRTA, linking Miami-Dade, Broward and Palm Beach Counties is shown. The use of the term rapid transit is defined as any heavy rail, light rail, or express buses operating on exclusive rights-of-way.

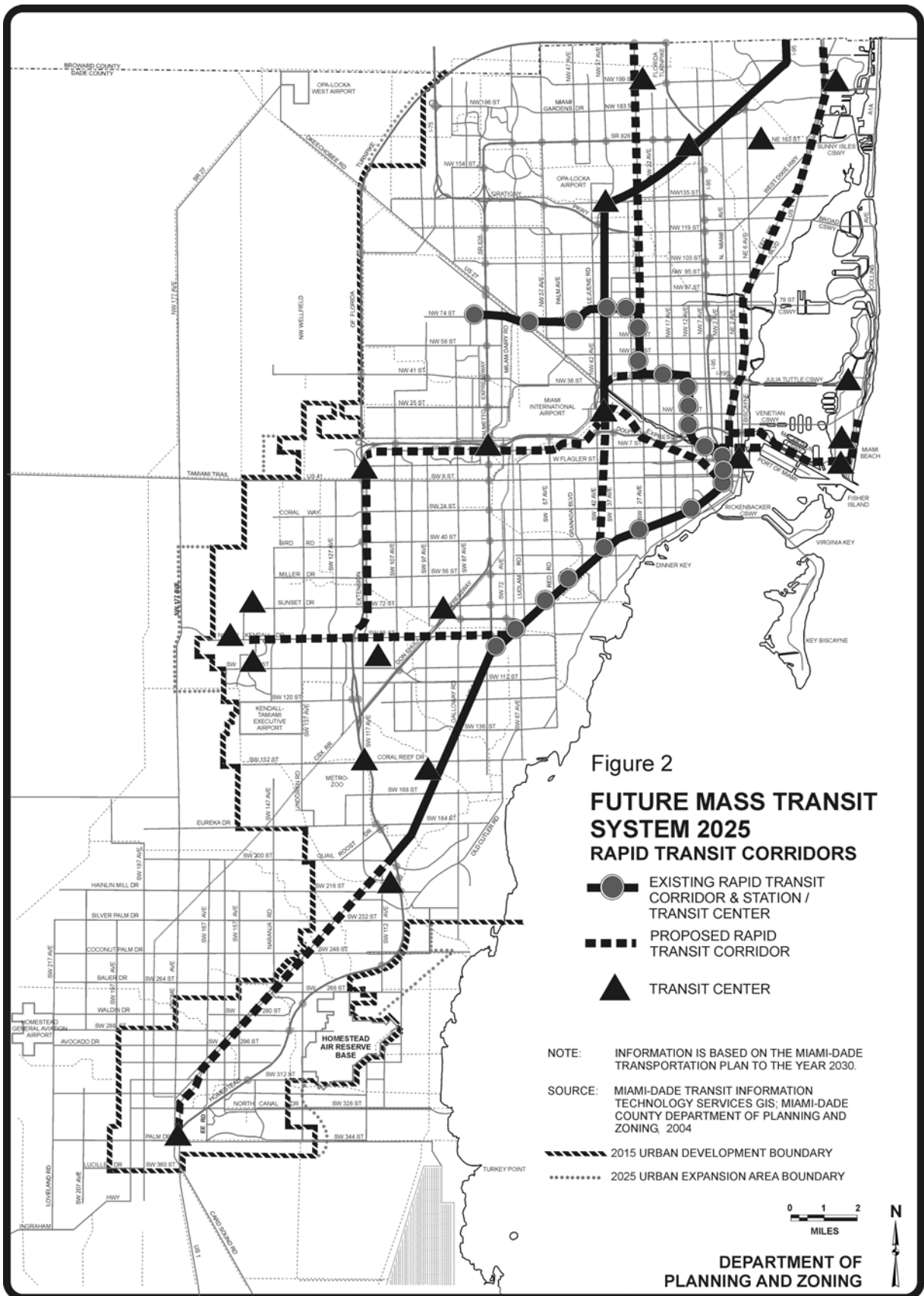
Figure 3 shows the existing Metromover system comprised of the downtown loop, Omni and Brickell legs, and the stations serving the system. Also shown are two planned future station locations.

Figure 4 shows proposed major traffic generators and attractors consistent with development patterns shown on the 2015 and 2025 Land Use Plan Map.

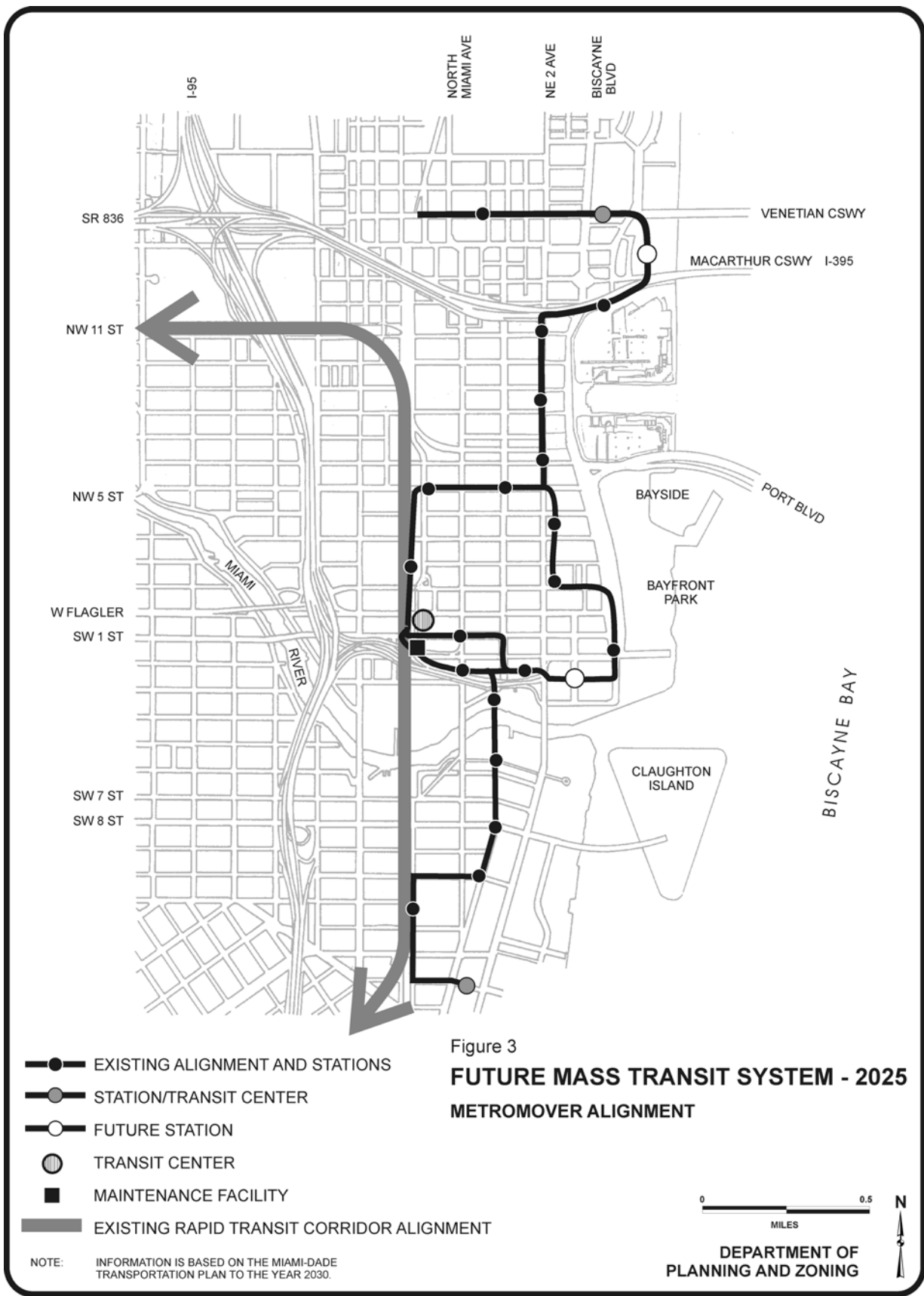
The Metropolitan Planning Organization (MPO), which coordinates all transportation planning for Miami-Dade County periodically updates the MPO's Long Range Transportation Plan. It is anticipated that the planned mass transit facilities included in this Comprehensive Plan Element will be refined and adjusted during future plan amendment cycles to reflect findings of that planning activity, in keeping with the goals, objectives and policies of the CDMP.

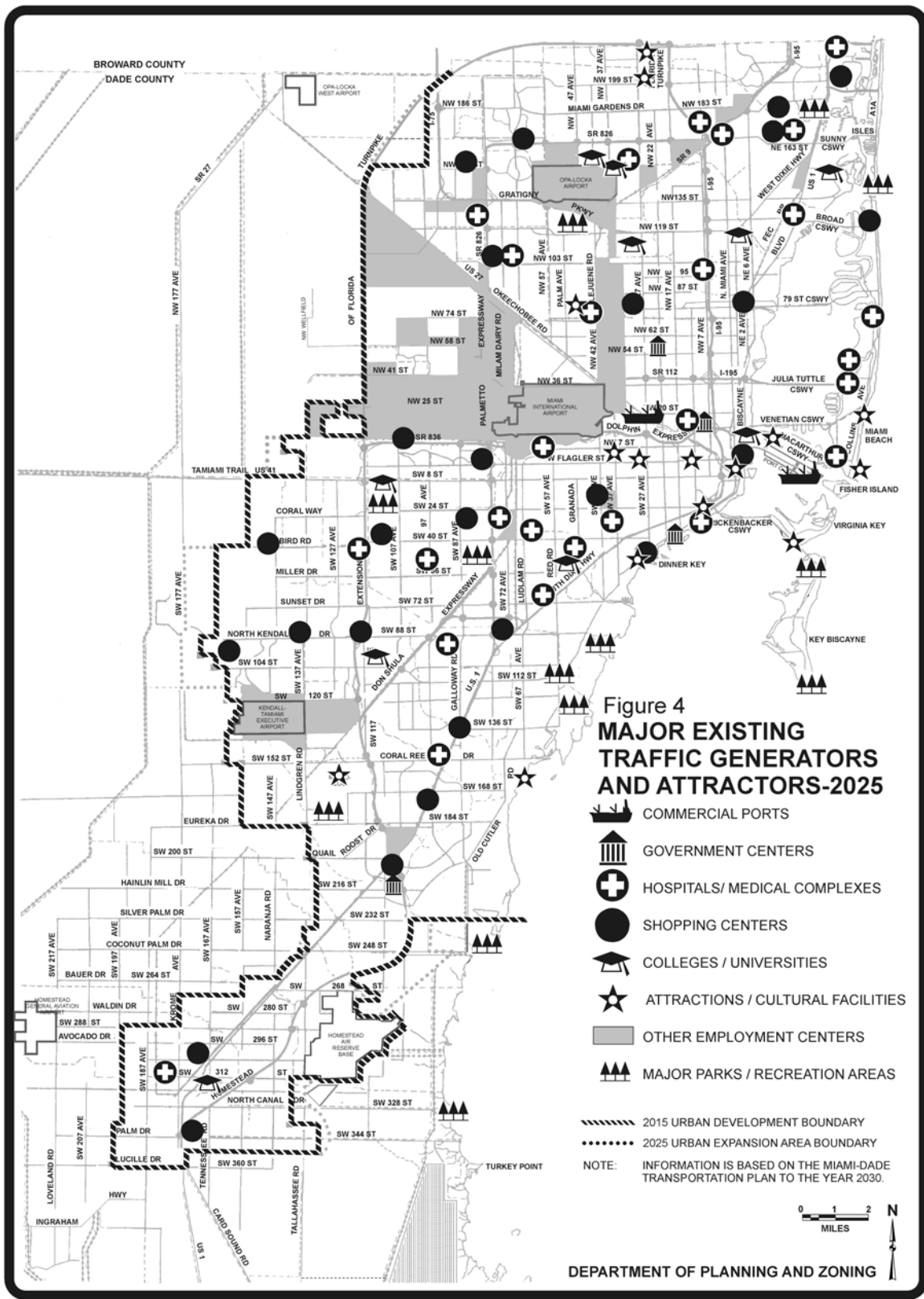


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## **Monitoring Program**

Criteria Rule (Rule 9J-5, Florida Administrative Code [F.A.C]) requires that local comprehensive plans contain adopted procedures for monitoring and evaluating the Plan and its implementation (Sections 9J-5.005[1][c][5], and 9J-5.005[7], F.A.C). In addition, successful implementation of level of service standards and requirements that services be available at the time of development, also require the maintenance or enhancement of monitoring and reporting programs. This section outlines the substantive elements of Miami-Dade County's monitoring program pertinent to the objectives, policies and parameters referenced in this Subelement.

The administrative requirements for monitoring and preparation of the EAR as outlined in Section 9J-5.005[7], F.A.C. are not repeated here. They are outlined only in the Land Use Element to avoid redundancy. The reader is referred to the element for a summary of those procedural requirements.

### **Monitoring Achievement of Mass Transit Objectives**

The following measures will be used to monitor progress and assess achievement of the various objectives contained in the Mass Transit Subelement for the Evaluation and Appraisal Report (EAR):

**Objective MT-1 and Objective MT-2.** All areas of Miami-Dade County will be monitored annually to determine transit system compliance with the adopted level-of-service standard through the use of service planning guidelines developed by MDT. The most recent estimates of population and work force prepared by the Department of Planning and Zoning will also be used.

**Objective MT-3.** Monitor the implementation of policies/objectives for the future operations of transit in Miami-Dade County related to service levels, fare structures, ridership projections, financial needs and recommended funding sources.

**Objective MT-4.** MDT will annually update and identify the number and location of transit facilities and types of transit services which provide access to traffic generators such as major centers of employment, commercial, medical, educational, governmental and recreational activity.

**Objective MT-5.** MDT will monitor and compile the necessary data in compliance with the applicable reporting requirements of Title VI Civil Rights, Americans with Disabilities Act of 1990, and Chapter 427, Florida Statutes.

**Objective MT-6.** Review and comment, as necessary, on various transit-related plans and programs of the Florida Department of Transportation, the Metropolitan Planning Organization, and where appropriate, adjacent counties. Monitor annually, the status of improvements programmed for implementation in Transportation Improvement Program (TIP) and Capital Improvements Element (CIE) and improvements identified in the Mass Transit Subelement.



**Objective MT-7.** MDT will investigate and report on strategies for preserving planned mass transit rights-of-way and exclusive corridors by 2007.

**Objective MT-8.** MDT will provide an annual listing improvements made during the previous year to the park and ride lots and garages; bicycle lockers and racks; pedestrian walkways; taxi and jitney stands; that are incorporated as part of transit facilities. In the course of reviewing highway improvement projects, comments will be made related to the provision of bus turnout bays, bus shelters, HOV lanes, and other associated facilities to accommodate mass transit.

# **AVIATION SUBELEMENT**

## **Introduction**

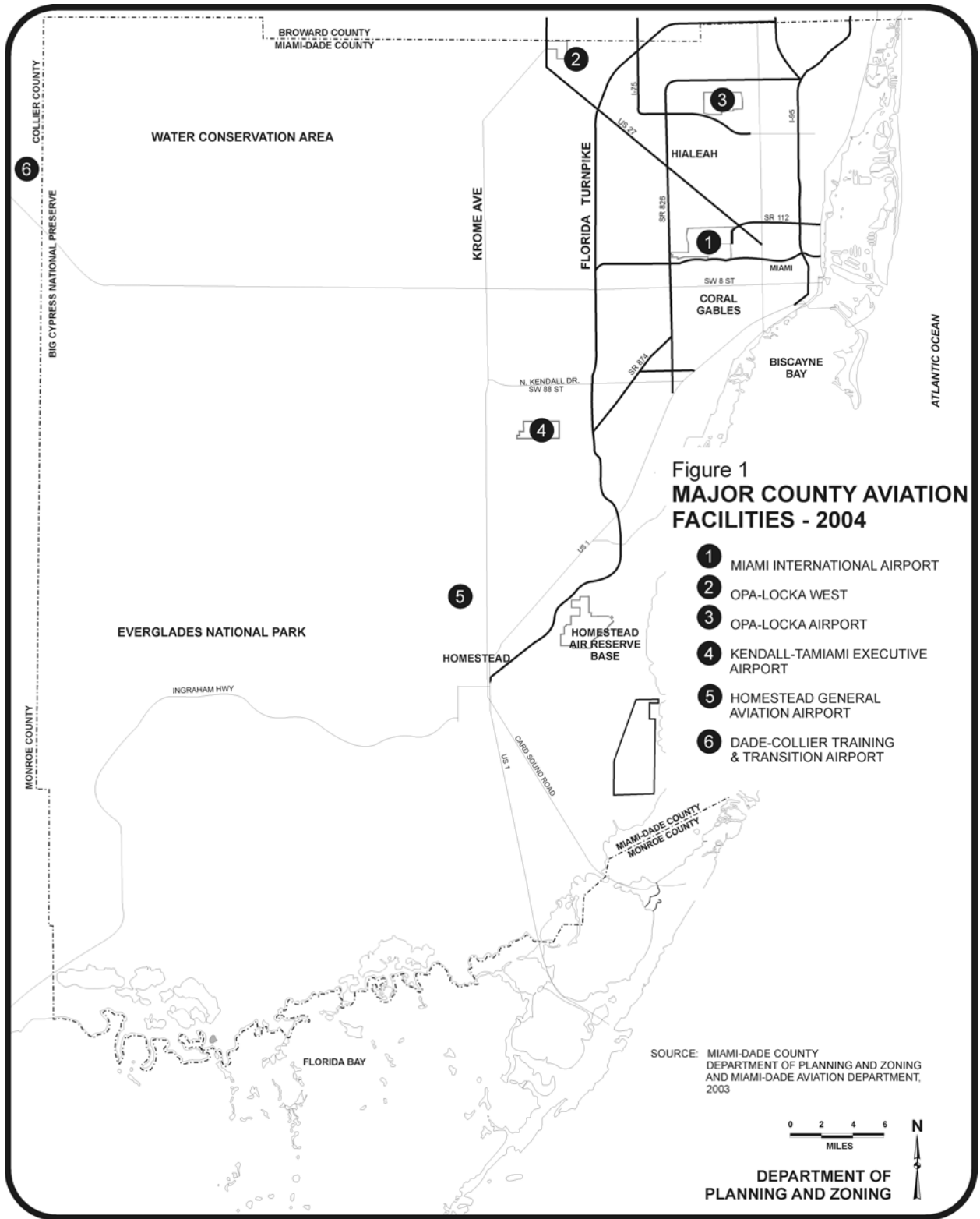
The Miami-Dade County aviation system consists of the following facilities owned and operated by Miami-Dade County: Miami International, Opa-Locka, Kendall-Tamiami Executive, Homestead General, Opa-Locka West and the Miami-Dade Collier Training and Transition Airports. These major aviation facilities are shown on Figure 1. Also shown on Figure 1 is the Homestead Air Reserve Base a facility owned and operated by the federal government. The goal, objectives and policies of this subelement address only the County owned and operated facilities listed above.

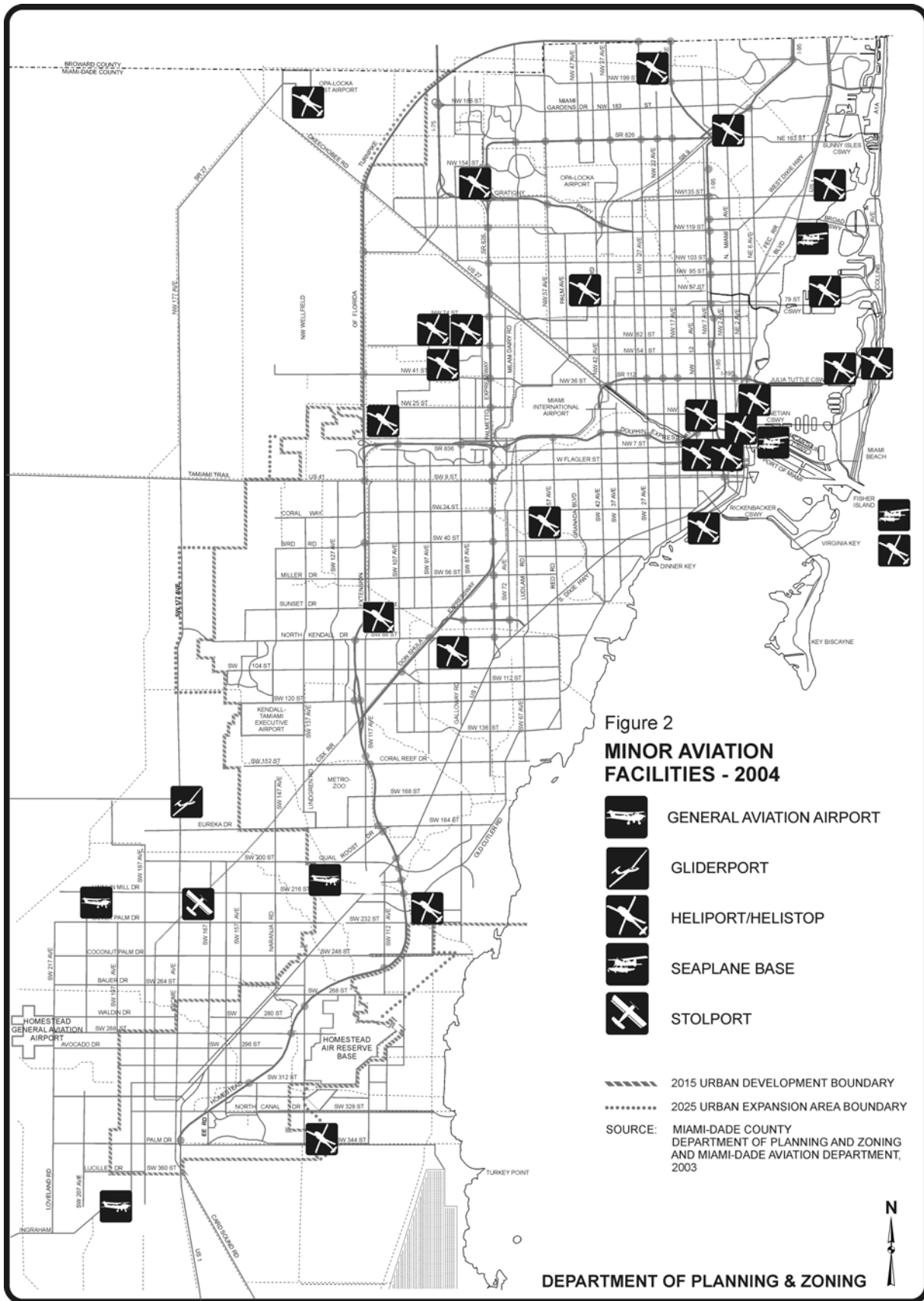
Minor facilities, usually privately owned airstrips, gliderports, heliports, helistops, seaplane bases and STOL aircraft ports are shown on Figure 2. They generally do not have a significant role in the County aviation system and therefore are not given further consideration in this Subelement.

## **The Plan**

In general, the Aviation Plan calls for (a) the continued expansion of Miami International Airport (MIA) as the region's major air carrier facility; and (b) the continued development of the remaining airports as general aviation, sport and recreation or training facilities in accordance with their designated role.

The following aviation system goal, objectives and policies have been designed to promote the implementation of the Aviation Plan. These policies are followed by a program for monitoring and evaluating implementation of the Plan.





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## GOAL

**ENSURE THE PROVISION OF AN ECONOMIC, INTEGRATED ENVIRONMENT- AND COMMUNITY-SENSITIVE, AND BALANCED SYSTEM OF AIRS TRANSPORTATION FACILITIES AND SERVICES TO MOVE PASSENGERS AND CARGO EFFECTIVELY AND EFFICIENTLY; ACCOMMODATE AND ENCOURAGE ALL TYPES OF GENERAL AVIATION ACTIVITY, INCLUDING BUSINESS, COMMERCIAL, INSTRUCTIONAL, AND PERSONAL ACTIVITY; AND ENHANCE THE ECONOMY AND QUALITY OF LIFE IN THE COUNTY AND REGION.**

### Objective AV-1

**Provide facilities necessary to accommodate forecast aviation demand and optimize level of service.**

#### Policies

- AV-1A. The Miami-Dade County Aviation Department with the assistance of the Florida Department of Transportation and the Federal Aviation Administration (FAA) shall, through facilities and operational improvements, provide system capacity to meet the following forecast levels of passenger activity and minimize delays.

Total	<u>Forecast Attainment Dates</u>		
<u>Passenger Level</u>	High	<u>Preferred</u>	<u>Low</u>
33 million	2006	2008	2010
36 million	2008	2010	2015
39 million	2010	2015	2020
50 million	2015	2020	2035

- AV-1B. The Miami-Dade County Aviation Department with the assistance of the Florida Department of Transportation and the Federal Aviation Administration shall, through facilities and operational improvements, provide system capacity to meet the following forecast levels of general aviation activity and minimize delays.

Planned	<u>Forecast Attainment Date</u>	
<u>Activity Level</u>	<u>Most Optimistic</u>	<u>Most Likely</u>
<u>Operations</u>		
750,000	2007	2010
875,000	2011	2028
1,000,000	2024	>2030

- AV-1C. The Miami-Dade County Aviation Department will participate with the Florida Department of Transportation and the Federal Aviation Administration in the implementation of the heliports system plan in accordance with federal regulations.

AV-1D. The Aviation Department shall plan and implement through impact assessments, public facility approval, and environmental permitting processes aviation facility capacity enhancements that are compatible with the Airport Master Plans and System Plans; the Florida Department of Transportation's Continuing Florida Aviation System Plan and 5-year Transportation Plan; Miami-Dade County Transportation improvement Program; and the Land Use, Conservation, Coastal Management and Capital Improvements Elements of the Miami-Dade County Comprehensive Development Master Plan.

## **Objective AV-2**

**Maintain and enhance the role of each airport in the aviation system.**

### **Policies**

AV-2A. Utilize the following air carrier facilities for the indicated roles:

<u>Airport</u>	<u>Role</u>
Miami International	International gateway hub (Commercial Air Service Airport)

AV-2B. Utilize the following general aviation facilities for the indicated roles:

<u>Airport</u>	<u>Role</u>
Opa-Locka	MIA general aviation reliever and corporate aviation jet center (Transport Airport)
Kendall-Tamiami Executive	MIA general aviation reliever and corporate aviation jet center (Transport Airport)
Homestead General	General aviation, flight training, sport and recreation (Utility Airport)

AV-2C. Utilize the following training facilities for the indicated roles:

<u>Airport</u>	<u>Role</u>
Miami-Dade/Collier Transition	Flight Training (Training and transport)
Opa-Locka West	Flight Training

AV-2D. Develop no air carrier or air cargo facilities at general aviation airports.

### **Objective AV-3**

**Minimize air space interactions and obstructions to assure airspace safety for aviation users and operators and the residents of Miami-Dade County.**

#### **Policies**

- AV-3A. Construct, improve and operate aviation facilities so as to minimize aircraft interactions, delays or circuitous routings.
- AV-3B. Provide air traffic control towers at general aviation airports when needed by aviation demand.
- AV-3C. Maintain height zoning controls over structure height to protect existing and proposed aviation flight paths consistent with federal agency guidelines.
- AV-3D. Seek federal agency cooperation in protecting future airspace from development obstructions.

### **Objective AV-4**

**Optimize airport utilization by maintaining and operating existing facilities at 80 percent of capacity before major capacity enhancements are implemented.**

#### **Policies**

- AV-4A. Make aviation capacity improvements at existing airports so long as they are cost effective and consistent with other CDMP objectives and policies.
- AV-4B. Continue to use favorable cost-benefit considerations in airport improvements decisions.

### **Objective AV-5**

**Seek to make capacity of airport access roadways and transit consistent with airport capacity.**

#### **Policies**

- AV-5A. Give priority consideration to on-site and off-site roadway capacity enhancements that provide, or will improve, airport access.

- AV-5B. Miami-Dade County shall utilize the Miami-Dade County Metropolitan Planning Organization's transportation planning and project review processes to coordinate, evaluate and implement transit linkages between Miami International Airport, Metrorail, commuter rail and future high speed rail systems, and the Seaport.
- AV-5C. Miami-Dade County shall utilize the Miami-Dade County Metropolitan Planning Organization's transportation planning and project review processes to make roadway access to airports compatible with the applicable Airport Master Plans and County and Florida Aviation Systems Plans, the Florida Department of Transportation Improvement Program, and consistent with the Transportation and Capital Improvement Elements of the Miami-Dade County Comprehensive Development Master Plan.

### **Objective AV-6**

**Maximize compatibility of aviation facilities and operations with the natural environment.**

#### **Policies**

- AV-6A. The Miami-Dade County Aviation Department shall expand existing, and locate and develop future aviation facilities so as to produce no significant adverse impact on the South Florida Water Management District Conservation Areas, Everglades National Park, Biscayne National Park, other environmental protection areas and wildlife protection areas in accordance with the policies of the Land Use; Conservation, Aquifer Recharge and Drainage; and Coastal Management Elements of the Miami-Dade County Comprehensive Development Master Plan, and pertinent regulations governing facility siting and development.

### **Objective AV-7**

**Maximize compatibility between airports and the surrounding communities.**

#### **Policies**

- AV-7A. Miami-Dade County shall implement the Homestead Air Force Base Air Installation Compatible Use Zone (AICUZ) Report guidelines through the Land Use Element of the Miami-Dade County Comprehensive Development Master Plan, the Miami-Dade County Zoning Ordinance and the South Florida Building Code to provide for land use compatibility in the vicinity of the Homestead Air Reserve Base.
- AV-7B. Miami-Dade County shall update its airport compatible zoning ordinances to promote compatible land use around Miami International, Homestead Air Reserve



Base, Opa-Locka, Kendall-Tamiami Executive, Opa-Locka West, and Homestead General Aviation Airports. These ordinances updates shall be based on the guidelines recommended in the following federal and State documents. Due to operational differences, all listed documents may not pertain to all airports.

(Federal) – Department of Transportation – Federal Aviation Regulation Part 150 Guidelines (Land Use Compatibility)

(Federal) – Department of Transportation – Federal Aviation Regulation Part 77 (Objects affecting Navigable Airspace)

(Federal) – Department of Defense Air Installation Compatible Use Zone Report (AICUZ) for HAFB (August 1988)

(State) – Chapter 333, Florida Statutes, (Airport Zoning)

(State) – Florida Department of Transportation – Airport Compatible Land Use Guidance Manual

- AV-7C. Miami-Dade County shall proactively maintain a “good neighbor” program at its airports to ensure that community concerns are addressed on a timely basis, aircraft operations are aware of noise abatement procedures, and mitigation programs are implemented and monitored.
- AV-7D. Landmark suitable revenue generating real estate and other parcels for the development of airport capacity and buffering as soon as feasible to ensure their availability when needed.
- AV-7E. To the extent feasible, utilize the CDMP Land Use Element to maximize compatibility of land use around airports, reflecting recommendation in the federal and State guidance documents cited in Policy AV-7B.

## **Objective AV-8**

**Maximize support of local and regional economic growth.**

### **Policies**

- AV-8A The Miami-Dade County Aviation Department, through the continued increase in the capacity of the County’s airports to meet the forecast aviation demands, and the State and local governmental economic development entities through their commerce and industry promotion programs should expand the importance of the aviation industry to Miami-Dade County and the regional economy.

- AV-8B. When consistent with aviation facility locational objectives for airspace safety and environmental and community compatibility, the Aviation Department shall provide additional facility and operational capacity in the aviation systems in locations that offer greatest potential for expansion of aviation-related economic development and redevelopment in the vicinity and opportunities for aviation-related employment for Miami-Dade County residents.

## **Objective AV-9**

**Maximize flexibility in the operation and expansion of the aviation system.**

### **Policies**

- AV-9A. Select system capacity improvements that can also be expected to meet needs beyond the 2020 planning horizon.
- AV-9B. Make system improvements that will accommodate emerging and future technology, such as the larger airplane wing spans of the Airbus 380 and other similar aircraft.
- AV-9C. Utilize advantageous financial phasing.
- AV-9D. Provide system capacity enhancements that also provide air traffic control systems such as dual arrival and departure streams.

## **Future Aviation Facilities**

Future aviation facility improvements are proposed to be made on or adjacent to the sites of existing airports. These sites are:

- Miami International Airport
- Opa-locka Airport
- Kendall-Tamiami Executive Airport
- Homestead General Airport
- Opa-locka West Airport
- Miami-Dade Collier Training and Transition Airport

The location and layout of these future facilities, including clear zones and points of ingress and egress, are indicated on the map series following this page. The configuration of the proposed site expansion and individual improvements at these locations are either yet to be determined or beyond the scope of this Subelement.

The natural resources and future land uses surrounding these facilities are identified in the map series and Future Land Use Plan map contained in the Land Use Element of this Plan.

### **Aviation Facility Improvements**

Meeting Miami-Dade County's current and future aviation needs will require numerous facility improvements to be made. These improvements are divided between those addressing existing deficiency needs, future growth needs, and other needs (i.e., renovation and remodeling, etc.) and between near term (2005-2009) and long term (2010-2025). These improvements are listed by facility on the following table and many near-term improvements are described in more detail the Capital Improvements Element.

Lands owned by Miami-Dade County at the Opa-Locka Airport that are designated as Terminal on the LUP map, may be developed for the uses described in this subsection. All proposed uses on such lands shall comply with the requirements of the Future Aviation Facilities Section of the Aviation Subelement, shall be compatible with, and not disruptive of, airport operations occurring on such lands, and shall comply with all applicable regulations of the Federal Aviation Administration and other applicable law.

The airside portion of the airport, which shall be deemed to consist of all portions of the airport where general public access is restricted (but not including terminal concourses), shall be limited to aviation uses, including but not limited to airfield uses such as runways, taxiways, aprons, clear zones, landing areas, and support and maintenance facilities such as control towers, flight service stations, access roads, fire stations, and fuel farms. Where not otherwise prohibited by law, open space and interim or existing agricultural uses and zoning may also be permitted in the airside portion, subject to such conditions and requirements as may be imposed to ensure public health and safety.

The landside portion of the airport, which shall be deemed to consist of all portions of the airport where general public access is not restricted and also terminal concourses, may include both aviation uses and non-aviation uses that are compatible with airport operations and consistent with applicable law. At least 30% of the land area in the landside portion must be developed with aviation-related uses or uses that directly support airport operations.

Aviation uses where general public access is allowed may include existing uses and the following or substantially similar uses:

- passenger terminal area, which may include non-aviation related uses designed to serve the traveling public and on-site employees, such as offices, personal services, retail activities, restaurants, auto rental businesses, and lodging establishments,
- parking garages and lots serving the airport,
- access roadways serving the airport,
- offices of aviation industry companies and the Miami-Dade County Aviation Department,
- facilities of fixed base operators,

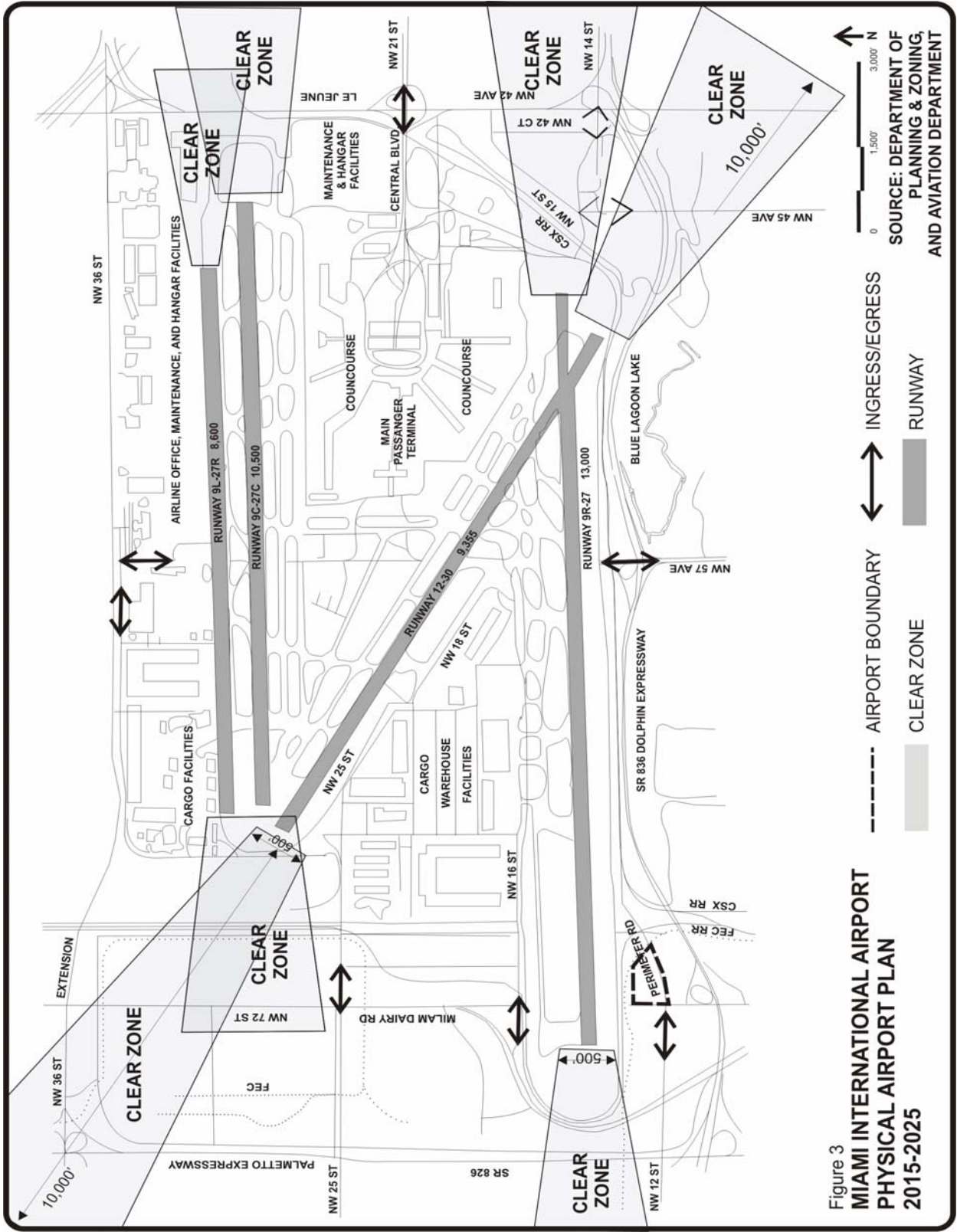
- hangar rentals and tie downs,
- ground transportation services,
- aircraft and automobile rental establishments,
- aviation-related educational uses such as flight schools, simulator training facilities, helicopter and aerobatics training and other educational facilities providing aviation courses,
- aviation-related governmental agency facilities,
- flying club facilities,
- aviation-related entertainment uses such as skydiving establishments, museums and sightseeing services, and
- aviation-related retail uses such as aircraft sales, electronic an instrument sales and pilot stores.

Subject to the restrictions contained herein, the following privately owned non-aviation-related uses may be approved in the landside area of the Opa-Locka Airport accessible to the general public:

- lodgings such as hotels and motels (except in terminal concourses),
- office buildings (except in terminal concourses),
- industrial uses such as distribution, storage, manufacturing research and development and machine shops (except in terminal concourses),
- agricultural uses, and
- retail, restaurants, and personal service establishments.

Such privately owned non-aviation related uses at the Opa-Locka Airport shall be limited as follows:

- (1) Those portions of the landside area that are not developed for uses that are aviation-related or directly supportive of airport operations shall range from 50 to 85 percent for industrial uses, 5 to 25 percent for commercial uses, 5 to 25 percent for office uses, 0 to 10 percent for hotels and motels, and 0 to 20 percent for institutional uses. The distribution, range, intensity and types of such non-aviation related uses shall vary by location as a function of the availability of public services, height restrictions, CDMP intensity ceiling for the Urban Infill Area (FAR of 2.0 not counting parking structures) or the Urbanizing Area (FAR of 1.5 not counting parking structures) involved, impact on roadways, access and compatibility with neighboring development. Freestanding retail and personal service uses and shopping centers shall front on major access roads preferably near major intersections, where practicable, and have limited access to major roadways.
- (2) Each non-aviation related use shall comply with applicable law, including but not limited to FAA regulations and any airport layout plan governing permissible uses on the entire airport property.



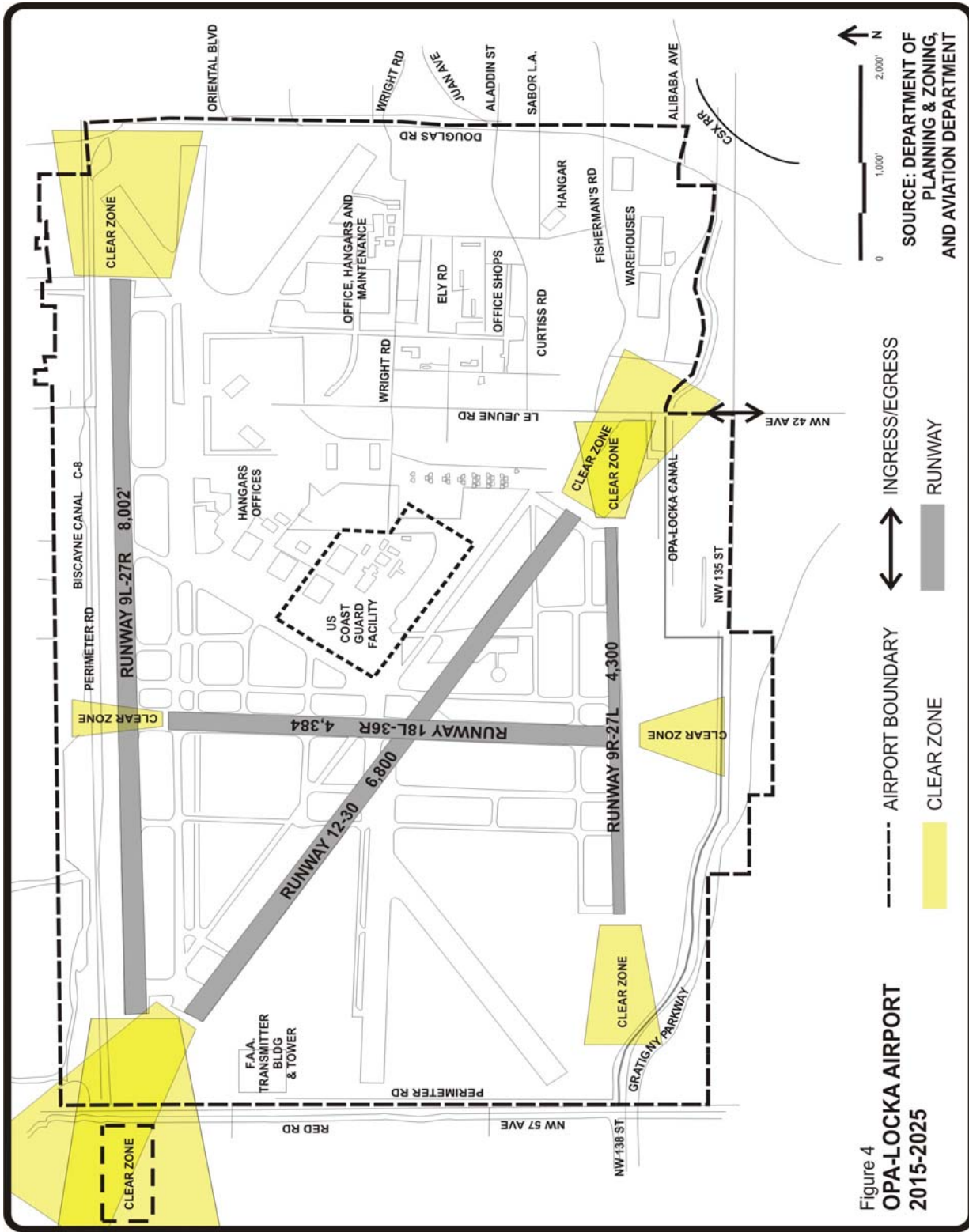
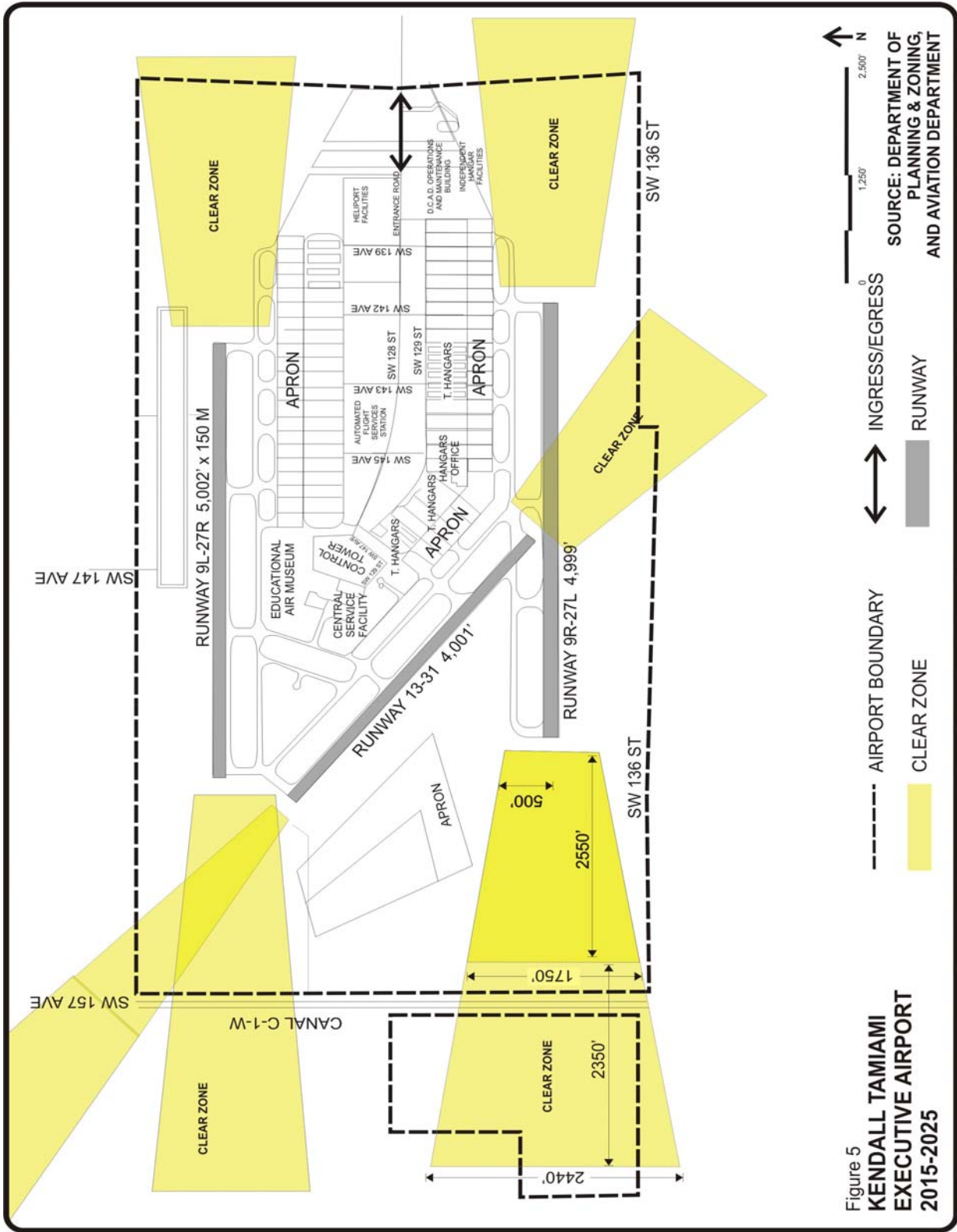
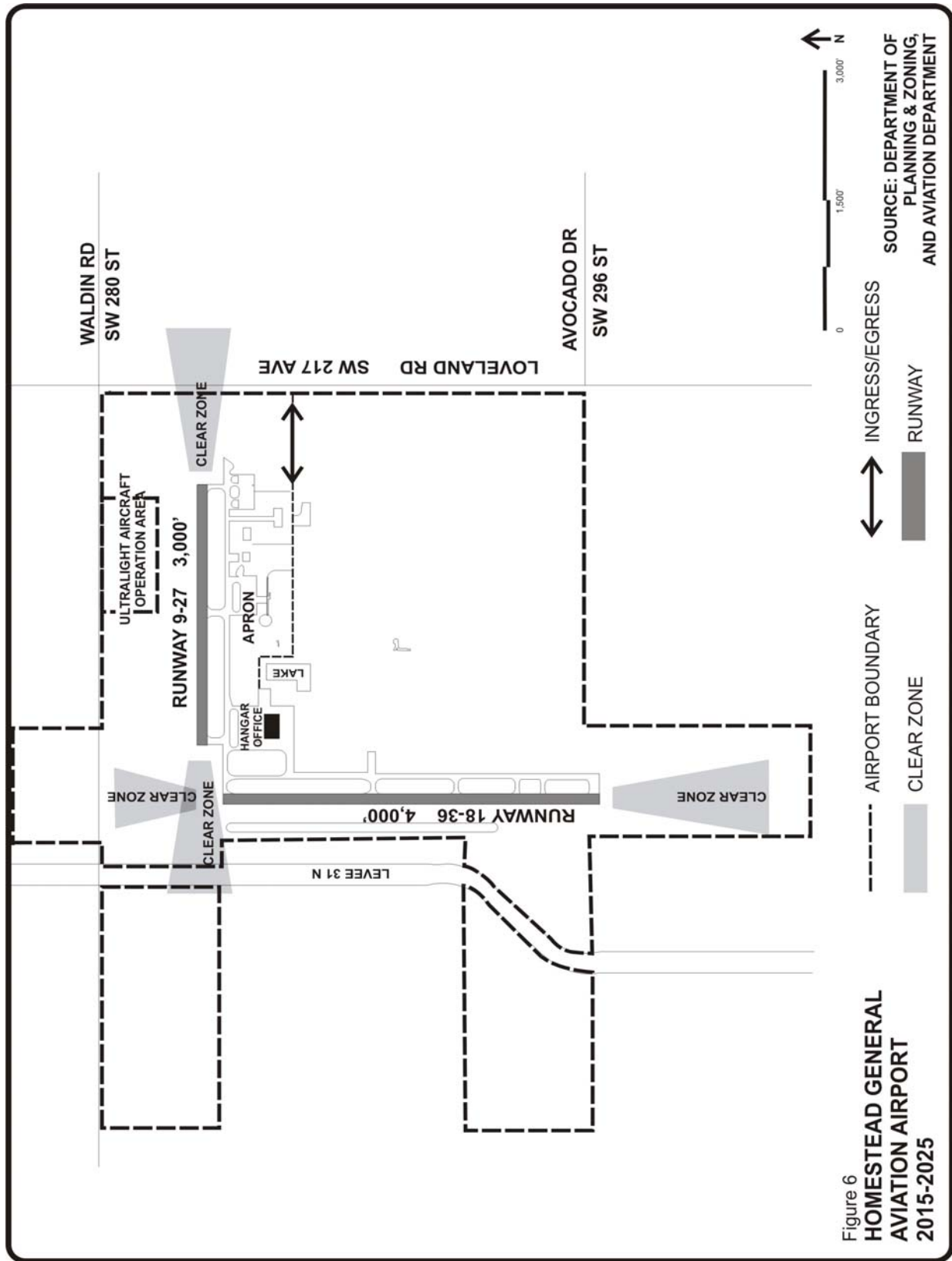


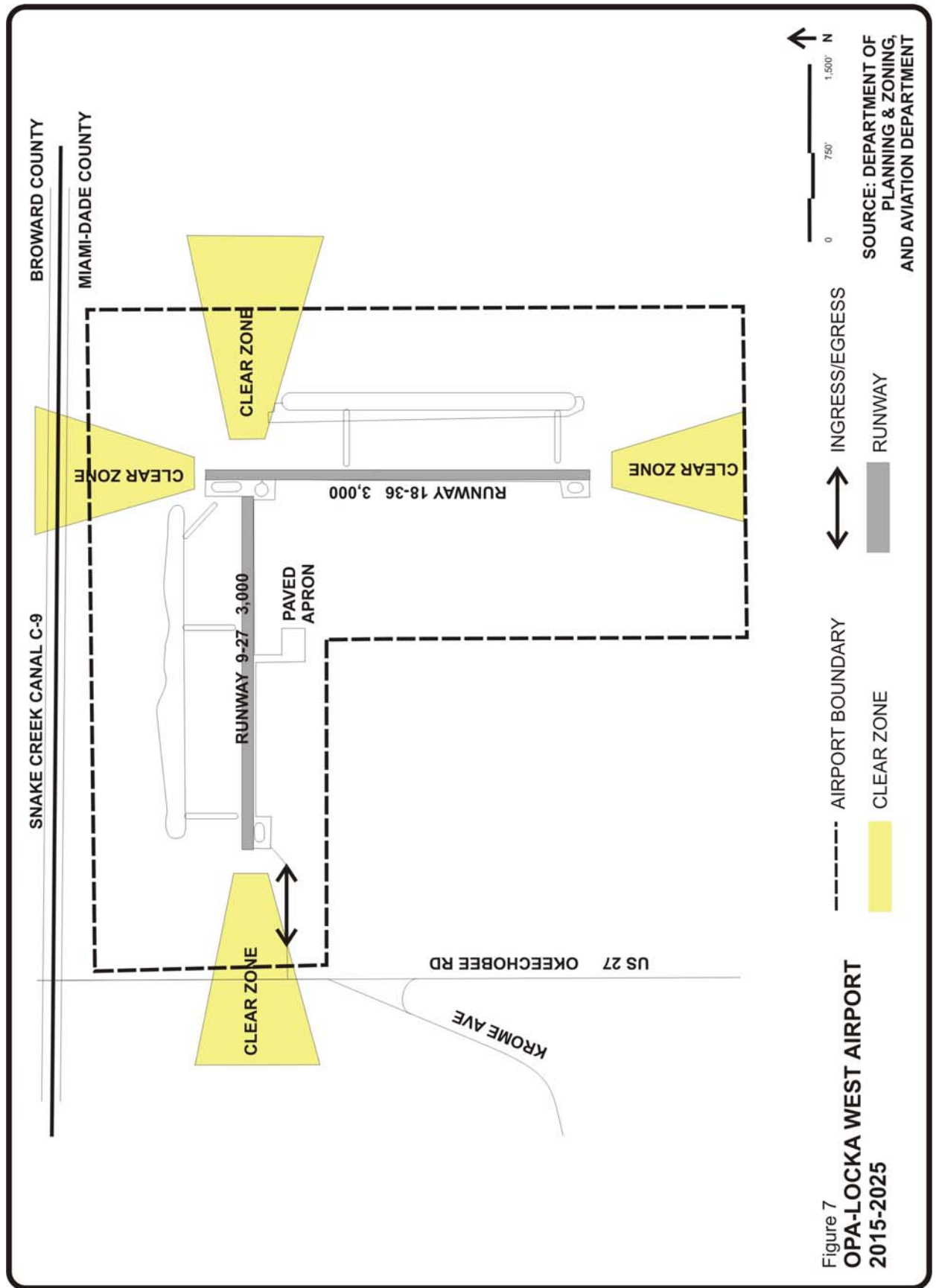
Figure 4  
OPA-LOCKA AIRPORT  
2015-2025

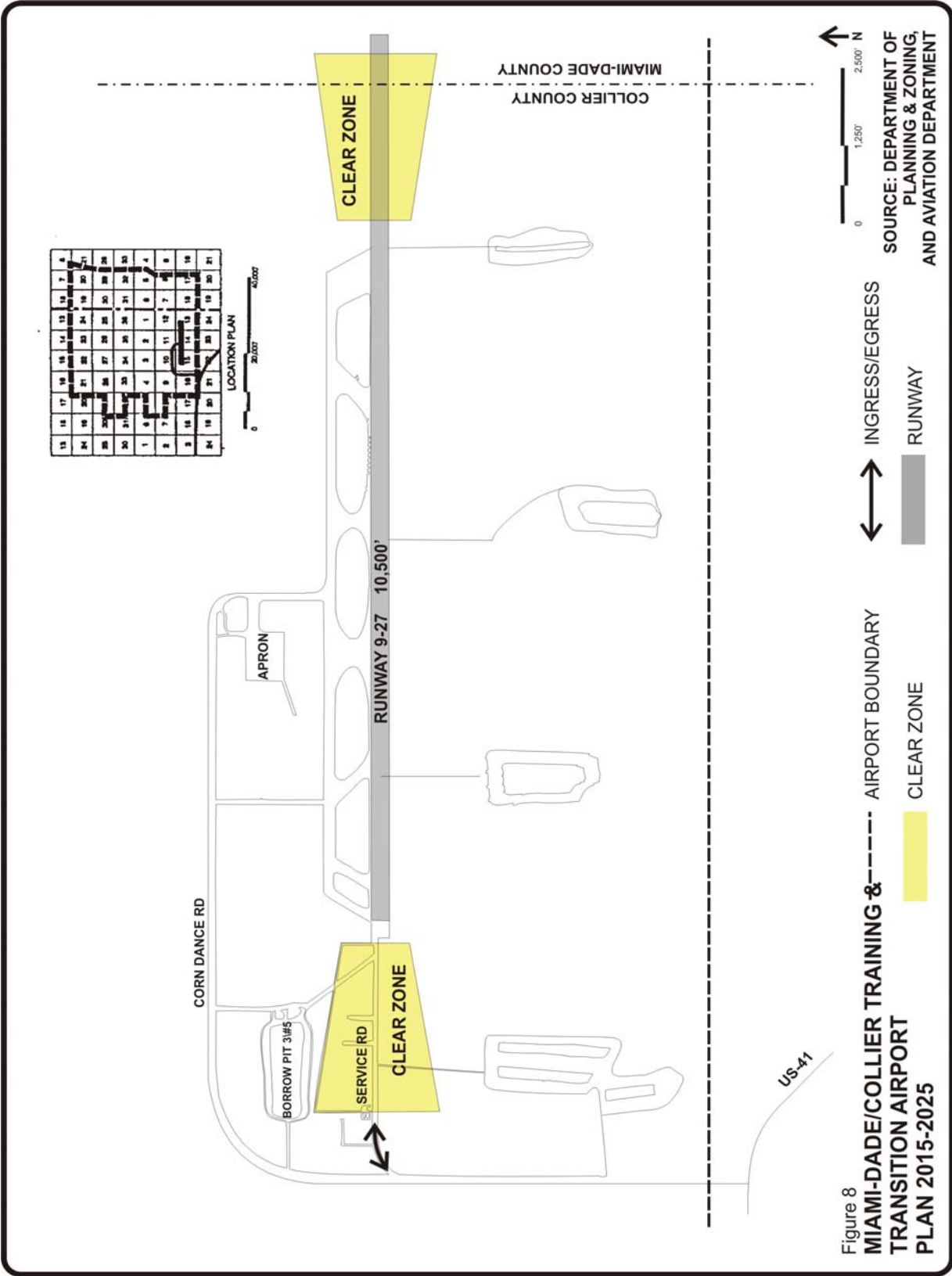












### Miami International Airport

Project	Need	Interval
<b>Runway/Taxiway</b>		
Midfield Area Development	Deficiency	Near Term
Runway Clear Zone Land Acquisition	Deficiency	Near Term
Miscellaneous Taxiway Improvements	Growth	Near Term
Taxiway "S" Extension		
Navigational Aids (NAVAIDS) Improvements	Deficiency	Near Term
<b>Terminal/Apron</b>		
NW 36 <sup>th</sup> Street Apron Improvement	Deficiency	Near Term
Terminal Expansion – North		
Phase III	Deficiency	Near Term
Terminal Expansion – South		
Phase I	Growth	Near Term
Phase II	Growth	Near Term
Terminal Expansion – Concourse F		
Concourse F Improvements – Phase III	Deficiency	Near Term
Miscellaneous Terminal Improvements		
Terminal D-E-F Wrap	Deficiency	Near Term
Commuter Terminal South	Deficiency	Near Term
Concourse A/D Expansion	Growth	Near Term
Concourse E Satellite Expansion	Growth	Near Term
Terminal Expansion – Concourse J	Growth	Near Term
Life Safety Improvements	Deficiency	Near Term
<b>Other Improvements</b>		
Cargo Facilities		
Ground transportation Improvements	Deficiency	Near Term
Employee Parking Improvements		
Phase II	Deficiency	Near Term
Corrosion Control Facility	Growth	Long Term

### Opa-locka Airport

Project	Need	Interval
<b>Runway/Taxiway/Apron</b>		
Rejuvenation of taxiway G north of runway 12-30	Deficiency	Near Term
Milling and resurfacing of runway 9R-27L	Deficiency	Near Term
Milling and resurfacing of taxiways P, R, and F	Deficiency	Near Term
Apron concrete slab replacement	Deficiency	Near Term
PDC rejuvenation for taxiways D, V, and Y	Deficiency	Near Term

Security enhancement project	Deficiency	Near Term
<b>Other</b>		
Airport Area Development	Growth	Long Term
Access and Patrol Roads Construction	Growth	Long Term
Replacement Buildings	Deficiency	Near Term

### **Kendall-Tamiami Executive Airport**

<b>Project</b>	<b>Need</b>	<b>Interval</b>
<b>Runway/Taxiway/Apron</b>		
Repave ramp areas	Deficiency	Near Term
Repave all runways	Deficiency	Near Term
Study need for Runway Expansion	Deficiency	Near Term
<b>Other</b>		
Security infrastructure facility	Deficiency	Long Term Near Term

### **Homestead General Airport**

<b>Project</b>	<b>Need</b>	<b>Interval</b>
<b>Runway/Taxiway/Apron</b>		
New Runway Land Acquisition and Development	Growth	Long Term
Control Tower	Growth	Long Term
Executive Terminal	Growth	Long Term
<b>Other</b>		
Storage Facility Construction	Growth	Long Term
NAVAIDS Addition	Growth	Long Term
Fuel Farm Construction	Growth	Long Term

### **Other Facilities**

<b>Project</b>	<b>Need</b>	<b>Interval</b>
Heliport (Including Downtown) Construction	Growth	Long Term
Security gate/CCTV installation at (Miami-Dade-Collier Training and Transition Airport)	Deficiency	Near Term
Upgrade ALS for a MALSR at (Miami-Dade-Collier Training and Transition Airport)	Deficiency	Near Term

## **Aviation Monitoring Program**

In order to enable the preparation of the periodic Evaluation and Appraisal Report (EAR) required by Section 163.3191, Florida Statute (F.S.), the Minimum Criteria Rule (Rule 9J-5, Florida Administrative Code [F.A.C.] requires that local comprehensive plans contain adopted procedures for monitoring and evaluating the Plan and its implementation.

This section outlines the substantive elements of Miami-Dade County's monitoring program pertinent to the objectives, policies and parameters referenced in the Aviation Subelement.

An important part of the implementation of the objectives of the Aviation Subelement is the establishment of a program for monitoring their progress. The Aviation monitoring program consists of the following measures:

### **Objective AV-1**

- Annual enplanement, cargo tonnage and operational levels at air carrier facilities.
- Annual operational levels at general aviation airports.
- Facility improvements at air carrier facility(ies).
- Facility improvements at general aviation and training and transition facilities.

### **Objective AV-2**

- Consistency of implementation role with the roles defined in this Subelement.

### **Objective AV-3**

- Number of structures penetrating the County airports' navigable airspace permitted since the latest EAR.

### **Objective AV-4**

- Capacity enhancements at airports operating at demand to average service volume (ASV) ratios greater than 0.8

### **Objective AV-5**

- Constructed and programmed roadway improvements serving County's aviation facilities since latest EAR.
- Levels of service of airport access roads at date of EAR contrasted with those since 2003.

### **Objective AV-6**

- Airport capacity enhancements at locations consistent with the Conservation and Coastal Management Elements of the Comprehensive Development Master Plan.
- Approved Environmental Impact Assessment reports/DRIs required for major facilities and improvements.

**Objective AV-7**

- Establishment or update of airport zoning ordinances for all Miami-Dade County Aviation Departmental facilities by year 2006.
- Capacity enhancements or operational changes at airports that do not substantially increase the area of residential and institutional use designation on the Land Use Element of the Comprehensive Development Master Plan that are within the calculated day-night average sound level (DNL) 75 noise area.

**Objective AV-8**

- Annual airport employment figures.
- Annual aviation-related business employment figures
- Employment figures in the vicinity of airports at date of EAR contrasted with 2003 by TAZ.

**Objective AV-9**

- Report number of projects at the County's aviation facilities, which expand flexibility of landside and airside facilities and operations.

# **PORT OF MIAMI RIVER SUBELEMENT**

## **Introduction**

The material presented in this Subelement is limited in scope to the shipping facilities found along the Miami River that serve shallow draft vessels. These shipping terminals were together formally designated as the Port of Miami River to meet regulations of the U.S. Coast Guard.

## **The Plan**

In general, the Port of Miami River Subelement promotes continued maritime business and traditional marine-related shoreline uses as well as the protection of environmental resources on the Miami River. The Plan for the Port of Miami River is expressed in the following goal, objectives and policies, and monitoring program.

## **GOAL**

**MAINTAIN AND ENHANCE THE WATER QUALITY, ATTRACTIVENESS AND ECONOMIC VIABILITY OF THE PORT OF MIAMI RIVER.**

## **Objective PMR-1**

**Maintain and promote marine activity on the Miami River and protect these activities from encroachment or displacement by incompatible land uses.**

## **Policies**

- PMR-1A. Miami-Dade County shall establish a marine industrial/commercial district along the banks of the Miami River west of NW 27 Avenue.
- PRM-1B. In making recommendations relating to requested zoning changes and permits for development and redevelopment along the Miami River, Miami-Dade County agencies shall promote the protection or inclusion of uses which are water dependent and/or water related, such as cargo shipping terminals and boat repair yards.
- PMR-1C. Miami-Dade County shall work to improve the economic vitality of the Port of Miami River in cooperation with other concerned agencies and organizations.

## **Objective PMR-2**

**Actions shall be taken to improve linkages between the shipping terminals on the Miami River and surface transportation routes and modes.**

### **Policies**

- PMR-2A     Initiate a Miami River Corridor Multimodal Transportation Study with cooperation of all concerned agencies (i.e. County, City, MPO, FDOT, MDX, US Coast Guard, etc.)
- PMR-2B     In cooperation with other concerned agencies and organizations, Miami-Dade County shall investigate and implement ways of improving roadway access between the Port of Miami River shipping terminals and the adjacent surface transportation system.
- PMR-2C     Miami-Dade County shall work with the Miami River Commission, the Miami River Marine Group, and other concerned agencies and organizations to improve the vitality of the Port of Miami River and to minimize traffic conflicts on adjacent roadways.

## **Objective PMR-3**

**The Port of Miami River shall be operated in a manner which minimizes impacts to estuarine water quality and marine resources and adjacent land uses.**

### **Policies**

- PMR-3A     Miami-Dade County shall continue to place high priority on having the polluted sediments removed from the Miami River.
- PMR-3B     Miami-Dade County shall stabilize all eroding County-owned shoreline areas and rights-of-way along the Miami River consistent with available funding, and the County shall develop an ordinance requiring shoreline stabilization where necessary on public and private sites along the river.
- PMR-3C     The Miami-Dade County Department of Environmental Resources Management shall ensure that stormwater runoff from future industrial uses shall be contained on site and not discharged to the River. An on-site retention system combined with an overflow outfall may be considered as an alternative to full on-site retention in those cases where a higher degree of flood protection is desired and maintenance of water quality is assured.



- PMR-3D. Miami-Dade County through its program of stormwater outfall removal and retrofitting shall eliminate detrimental stormwater outfalls along the Miami River by 2005.
- PMR-3E. Additional policies included in the Coastal Management Element regarding dockside pumpout facilities, bulkhead repair and construction and enforcement activities along the Miami River are hereby incorporated in the Subelement by reference.

#### **Objective PMR-4**

**The Port of Miami River, through the owners and operators of its international shipping terminal facilities regulated by the Maritime Transportation Security Act, with assistance from the Miami River Commission (MRC) and Miami River Marine Group (MRMG), shall recognize local, State and Federal security needs in all port operations, expansion and new construction.**

#### **Policies**

- PMR-4A The Port of Miami River, through the owners and operators of its international shipping terminal facilities regulated by the Maritime Transportation Security Act, shall annually audit operations of the Port of Miami River in light of the Miami River Port Security Plan and any new local, State and Federal security requirements.
- PMR-4B The County, MRC and MRMG shall seek funding from local, State and Federal sources to address domestic homeland security issues.
- PMR-4C The Port of Miami River, through the owners and operators of its international shipping terminal facilities regulated by the Maritime Transportation Security Act, with assistance from the MRC and MRMG shall ensure that new projects are designed and constructed in accordance with the Miami River Port Security Plan, as approved by the Miami River Security Committee on June 8, 2004, and applicable local, State and Federal security laws.
- PMR-4D In the event of an apparent conflict between the Miami River Port Security Plan, approved by the Miami River Security Committee on June 8, 2004, local, State and Federal law and/or agency directives, and other objectives in any Subelement, the Homeland Security-based requirements shall prevail.

## **Future Port of Miami River**

The Port of Miami River is expected to retain its share of the growing international trade activity occurring in Miami-Dade County. The banks of the Miami River west of NW 27 Avenue and east of the salinity dam will remain the predominant area for shipping facilities serving the small ports of the Caribbean. This western section of the Port of Miami River is recommended to be used only for marine industrial and commercial activities. The role of Miami-Dade County in maintaining maritime facilities in this port area is limited to that of facilitator, as Miami-Dade operates its own seaport facilities on Dodge and Lummus Islands. Miami-Dade will continue to facilitate marine activity on the Miami River through its legislative function of establishing and implementing land use policy, and in its administrative functions in providing and maintaining roadway infrastructure which provides landside access to the area.

Future land use in the Miami River area is depicted on the Land Use Plan map in the Land Use Element. Figure 1, which follows, also highlights those sites along the banks of the unincorporated portion of Port of Miami River area which should be reserved for continued commercial marine activity. Figure 1 also identifies points of highway access to the area and rail lines. Future natural resources of the area are mapped in the future natural resources map series in the Land Use Element.

Facility improvements planned by Miami-Dade County that will impact this area are primarily roadway projects. These are listed in the County's Transportation Improvement Program and the Miami-Dade Transportation Plan to the Year 2030. Overall, those projects will relieve congestion at points of access to the unincorporated Port of Miami River area and will enhance circulation through the area by replacing inadequate bridges and adding a new river crossing in the NW 32 Avenue corridor. Miami-Dade County will ensure that the new crossing provides for continued navigation upstream.



## **Port of Miami River Monitoring Program**

The monitoring measures for the objectives of this Subelement are the following:

### **Objective PMR-1**

- Indices showing the growth or shrinkage of the amount of river frontage devoted to marine related/dependent business activity shall be prepared biennially.
- Records of land use changes in the vicinity of the Miami River in unincorporated Miami-Dade County since 2003.
- Records of zoning changes in the vicinity of the Miami River in unincorporated Miami-Dade County since 2003.

### **Objective PMR-2**

- The number of ships, tonnage, types of cargo, and the value of cargo handled shall be reported. Numbers of full-time and part time employment at the shipping terminals, and an estimate of the annual payroll for each category, shall also be reported. These data shall be sought from the Miami River Commission and the Miami River Marine Group.
- The Department of Planning and Zoning in conjunction with the Florida Department of Transportation, the Metropolitan Planning Organization, The Miami River Commission and the Miami River Marine Group will prepare transportation improvements updates listing completed, underway, programmed and planned transportation improvements of significant repercussion to the Port of Miami River.

### **Objective PMR-3**

- The County's Department of Environmental Resources Management (DERM) shall list progress on shoreline stabilization, stormwater runoff, outfall removal/refitting and overall water quality along the navigable portion of the Miami River.
- Additional monitoring measures included in the Coastal Management Element regarding water quality and protection of natural resources, as related to the Miami River west of NW 27 Avenue, are adopted by reference.

### **Objective PMR-4**

- Compliance with applicable security requirements, Maritime Transportation Security Act and the Miami River Port Security Plan.

# **THE PORT OF MIAMI MASTER PLAN SUBELEMENT**

## **Introduction**

The Dante B. Fascell Port of Miami-Dade has historically been a bayfront cruise and cargo port with strong connections to downtown Miami and the south Florida economy. Over the last three decades, port expansion has focused on the creation of an island facility surrounded by deep-water channels. As the Port of Miami continues to grow, it will strengthen its mainland roots, seeking stronger intermodal connections with downtown, mixed use ties with adjacent communities, and lasting contributions to surrounding natural resources.

The Port of Miami (port) is owned by Miami-Dade County and operated by the Miami-Dade County Seaport Department. Port of Miami services consist of cruise and cargo operations. Cruise facilities consist of passenger terminal and ancillary facilities located on Dodge Island, while cargo facilities consist primarily of container terminals and gantry cranes located on Lummus Island, with break bulk and refrigerated cargo also handled to a lesser extent. For the purposes of this plan, Dodge and Lummus Islands which have been joined through phased implementation of previous master plans are now considered as one island. In this plan "on-island" refers to facilities located on these two now joined islands, while "off-island" refers to locations or facilities elsewhere.

The port is intermodally linked through truck routes, which connect the port to the interstate highway system through downtown Miami. Railroad service extends into the port, but has not been heavily utilized for transshipment of cargo. The intermodal rail transfer facilities used by the port are off-island, some miles away. The need for rail service is increasing, and port rail facilities will need to be assessed accordingly.

## **The Plan**

The port's cargo and cruise facilities are beginning to reach capacity. Therefore, the Port of Miami Master Plan calls for enhancement of existing facilities to satisfy the needs of an increasingly technological and competitive customer base and planned expansion of both on- and off-island cruise passenger and cargo-handling facilities. Off-island expansion policies provide for a maritime park for a mixed-use cruise facility and an intermodal logistics transfer facility for cargo storage and facilitation of cargo movement. This growth will be necessary to accommodate projected passenger and cargo volumes shown below in Table 1.

Table 1  
Port of Miami Projected Cruise Passenger Volumes and  
General Cargo Tonnage

Year	Cruise Passengers (Millions)	Cargo Tons (Millions)
2015	Low: 4.978 Medium: 6.441 High: 7.748	Low: 13.974 Medium: 21.887 High: 36.320

Source: Miami-Dade County Seaport Department, 2004.

The following goals, objectives and policies provide for the implementation of the Port of Miami Master Plan. These policies are followed by a program for monitoring and evaluating implementation of the plan.

## **GOAL I.**

**THE PORT OF MIAMI SHALL ENDEAVOR TO RETAIN ITS POSITION AS THE TOP-RANKING CRUISE PORT OF THE WORLD WHILE EXPANDING ITS SHARE OF THE CRUISE MARKET, AND CONTINUE TO EXPAND ITS ROLE AS ONE OF THE LEADING CONTAINER PORTS IN THE NATION.**

### **Objective PM-1**

**The port shall maintain and renovate existing passenger facilities and complete the construction of new passenger facilities required by the year 2015 to accommodate the projected numbers of cruise and ferry passengers and ships.**

### **Policies**

- PM-1A. The port shall construct new berths and terminals on-island and off-island to the extent possible to accommodate the projected volumes of passengers and ships; however, any expansion of port facilities into existing and planned public parkland shall be designed to promote public access to the waterfront and park and recreation opportunities.
- PM-1B. The port shall construct the parking, roads and other ancillary improvements required on- and off-island to service existing and new cruise facilities.
- PM-1C. The port shall rehabilitate existing terminal facilities wherever required and possible.
- PM-1D. The port shall continue its policy for flexibility in the construction of its facilities so as to accommodate both the mega-cruise ships and the smaller cruise ships.

PM-1E. The port shall respond to new and expanding passenger and car ferry markets through appropriate study and implementation of on- and off-island facilities.

### **Objective PM-2**

**The port shall expand its cargo-handling and related intermodal facilities to the optimum extent possible by the year 2015 to accommodate the projected cargo tonnages.**

#### **Policies**

PM-2A. The port shall construct new berths, aprons, operations areas, and storage areas to the extent required for the projected cargo tonnages.

PM-2B. The port shall provide cargo-handling equipment to the extent necessary to load and off-load the projected cargo in an efficient and competitive manner.

PM-2C. The port shall construct additional railroad tracks, marshaling yards, intermodal logistic transfer facilities and other access improvements necessary for the efficient, competitive and rapid movement of cargo.

PM-2D. The port shall monitor cargo operations and will initiate an update of cargo master planning documents as needed.

### **Objective PM-3**

**The port shall maintain and improve existing facilities and support infrastructure to extend their service life and maximize efficiency so as to minimize the requirements for new facilities, and keep pace with evolving industry trends and technology.**

#### **Policies**

PM-3A. The port shall update and implement a comprehensive preventative maintenance program for its facilities.

PM-3B. The port shall provide adequate facilities and personnel to implement its preventative maintenance program.

PM-3C. The port shall evaluate and improve equipment, technologies and related facilities deemed necessary to support existing and expanded operations.

PM-3D. The port shall encourage its users to be more efficient in their use of land and operations.

## **GOAL II.**

**IN CARRYING OUT ITS DAY-TO-DAY OPERATIONS AND ITS LONG-TERM EXPANSION PROGRAM, THE PORT OF MIAMI SHALL MINIMIZE ANY DETRIMENTAL EFFECTS ON THE ENVIRONMENT, THE COMMUNITY, AND SUPPORTING INFRASTRUCTURE AND SHALL CONTINUE TO COORDINATE ITS OPERATION AND EXPANSION ACTIVITIES WITH FEDERAL, STATE, AND REGIONAL AGENCIES OTHER MIAMI-DADE COUNTY DEPARTMENTS, NEIGHBORING MUNICIPALITIES, AND SURROUNDING COMMUNITIES AS APPROPRIATE.**

### **Objective PM-4**

**The port shall promote sound environmental practices in its day-to-day operations and long-term maintenance and expansion plans, consistent with the unique role and responsibilities of deep-water port facilities.**

#### **Policies**

- PM-4A. The port shall periodically review its environmental practices in response to new information and community issues.
- PM-4B. The port shall maintain or obtain, as appropriate, environmental agency approvals for existing and proposed port expansion activities, including extension of existing permits as necessary and preparation of new master expansion permits to address longer range expansion plans. The port shall ensure that required mitigation, including, but not limited to, creation of artificial reefs and habitat restoration and enhancement activities in Biscayne Bay, is implemented. The capital projects proposed in this plan element constitute the development program to be undertaken by the port, with full acknowledgement that each project may proceed only after required environmental and community evaluations are conducted, regulatory and CDMP conformity are determined, and regulatory approvals are obtained.
- PM-4C. By 2006, the port shall explore the feasibility of mitigation banking as a long-range option for natural resource planning. The feasibility study should address the beneficial use of suitable dredged materials, the value of integrated ecosystems including submerged habitats, shoreline habitats, and upland areas for mitigation, and ways to integrate public access, as well as recreational and educational opportunities into mitigation areas.



PM-4D. By 2006, the port shall develop a Dredged Materials Management Plan which addresses long-term needs for spoil disposal and beneficial use of dredged material.

#### **Objective PM- 5**

**The port shall maintain its policy of cooperation with all levels of government and the community in the resolution of environmental issues.**

##### **Policies**

PM-5A. The port shall encourage its users to comply with applicable existing policies designed to minimize particulate emissions from ships in port.

PM-5B. The port shall continue to ensure that the disposal of any spoil not used as fill in its land area is conducted in accordance with permits.

PM-5C. The port shall stabilize all its remaining unconsolidated shorelines and minimize the turbidity associated with maintenance dredging.

#### **Objective PM-6**

**The port shall coordinate off-island expansion activities with affected communities.**

##### **Policies**

PM-6A. The port shall conduct the following analysis relative to off-island expansion activities as part of an integrated planning and public participation process: impact analysis on surface transportation linkages, environmental resources, adjacent land uses, and water, wastewater and solid waste facilities.

PM-6B. The port shall integrate expansion activities into the physical, social and economic fabric of the surrounding communities.

PM-6C. The port shall provide public access to the waterfront when appropriate and not in conflict with safety and operation practices. Expansion into parkland shall be consistent with Policy PM-1A.

#### **Objective PM-7**

**The port shall continue to identify and obtain in a timely manner all required permits, leases, development approvals or land acquisition needed to implement its Master Development Plan; to construct and operate its facilities in cooperation with the appropriate federal, state, and local agencies, and in conformance with the Miami-Dade County Comprehensive Development Master Plan.**

## **Policies**

- PM-7A. The port shall develop and operate its facilities in conformance with applicable federal, state, and local regulations.
- PM-7B. The port shall take cognizance of all relevant portions of the Miami-Dade County Comprehensive Development Master Plan and development regulations in the construction and operation of its facilities, while at the same time recognizing the unique needs and public role (including navigational safety) of deep-water port facilities in Miami-Dade County. Of particular relevance are the provisions of the land use, conservation, coastal management, and transportation elements, which must reflect port requirements.
- PM-7C. The port shall work with the Miami-Dade County Department of Planning and Zoning to consider the appropriateness of a seaport overlay zoning district to accommodate port-compatible mixed uses, appropriate landscape clustering and review of setbacks and signage.
- PM-7D. The port shall represent the county's maritime community in enhancement of navigation, safety and commerce.

## **Objective PM-8**

**The port shall coordinate port expansion activities to achieve appropriate land uses, joint-uses and joint-venture partnerships.**

## **Policies**

- PM-8A. The port shall work with other agencies and the private sector to maximize the economic benefits to be derived from expanded port operations.
- PM-8B. The port shall consider other uses including, but not limited to, commercial, recreational, cultural, hospitality and residential uses accessible to port users, county visitors and residents, in its on- and off-island port developments, so long as these uses are compatible with the primary port use.
- PM-8C. The port shall consider multi-use options for all new facilities, including dual purpose parking garages and mixed-use development.

## **Objective PM-9**

**The port shall coordinate landside and waterside transportation issues with pertinent federal, State, County (including adjacent counties) and City agencies to ensure that the Port's requirements are consistent with the abilities of the agencies to provide the services needed to support these activities.**

## **Policies**

- PM-9A. Miami-Dade County shall continue to work in partnership with the City of Miami, the Metropolitan Planning Organization (MPO), the Florida Department of Transportation (FDOT), and other affected entities to implement the Miami Downtown Transportation Master Plan through interagency agreements, amendments to the MPO's Long Range Transportation Plan and Transportation Improvement Program and similar plans and programs of other responsible entities to incorporate recommended provisions, as appropriate.
- PM-9B. In addition to the Miami Downtown Transportation Plan to be conducted pursuant to policy PM-9A, the port shall work with other agencies to develop a comprehensive analysis of its transportation requirements for the next 20 years to meet additional projected cruise passenger and cargo transport needs. For cruise transportation needs, the focus will be on more efficient links between port facilities and the airport, and between port facilities and local excursion destinations. For cargo operations, the focus will be on better links between intermodal centers and port facilities, more efficient access between port facilities and the interstate system, and better connections between port facilities and industrial centers.
- PM-9C. The port shall work with all applicable agencies to implement the direct port/interstate transportation link and intermodal facilities required to meet the needs of the port and the community.
- PM-9D. The port shall work with all appropriate local, state and regional agencies and governments to assure that any actions that could either facilitate or impede planned port growth and development are fully evaluated.
- PM-9E. Recognizing that the federal government has merged the tri-county South Florida region into one Metropolitan Statistical Area (MSA) and the state has authorized the creation of the South Florida Regional Transportation Authority (SFRTA), the port will collaborate with partners who seek synergistic solutions to the region's multimodal transportation constraints. Collaborative activities reflecting the growing importance of regional transportation planning are expected to include implementation of inclusive plans and studies such as the Statewide Intermodal System Plan, Phase III of the Florida Multimodal Trade Corridor Assessment series, and the Intermodal Connectivity in the Atlantic Commerce Corridor Assessment. The port will also support designation of the Atlantic Commerce Corridor as a federal Corridor of National Significance or any similar designation that will help attract critical capital improvement funding to the region.
- PM-9F. The port shall assist in implementing the recommendations issued pursuant to policies PM-9A and PM-9B that will provide improvements to the County's roadway and transit networks that are important to the movement of port-related freight, and cruise passengers.

- PM-9H. The port shall work with the City of Miami, other County agencies and the Florida Department of Transportation to identify and improve the key problem intersections and improve access to and from the port.
- PM-9I. The port shall support the review and construction of future channel and navigational improvements through the United States Army Corps of Engineers Miami Federal Harbor Project General Reevaluation Report and other appropriate means.

### **Objective PM-10**

**The port shall work with County departments and utility providers to ensure that necessary capacity is available to support existing and proposed uses in advance of need.**

#### **Policies**

- PM-10A. The port shall implement best management practices, monitoring programs and other measures to improve stormwater quality per its National Pollutant Discharge Elimination System Stormwater Pollution Prevention Plan, dated November 2000.
- PM-10B. The port shall complete a Stormwater Management Master Plan by 2006 which shall: identify existing stormwater infrastructure conditions and any potential need for infrastructure improvements that may be required to meet NPDES and State of Florida water quality standards; and, include a schedule for stormwater improvements that may be required. The port shall propose amendments to the Capital Improvements Element to implement improvements, either through planned development and redevelopment activities or through retrofitting of existing areas.
- PM-10C. By 2006, the port shall complete construction projects arising from the Consent Agreement with Miami-Dade County Department of Environmental Resources Management pertaining to extension of sanitary sewer lines into the western half of the port island facility and elimination of septic tank systems in the same area.
- PM-10D. The port shall continue to assess the capacity of water lines to determine if additional capacity or water pressure is needed to accommodate future development. The Seaport Department shall schedule necessary improvements to the water system in the Capital Improvements Element.

## **Objective PM-11**

**The Port shall recognize local, state and federal security needs in all port operations, expansion and new construction.**

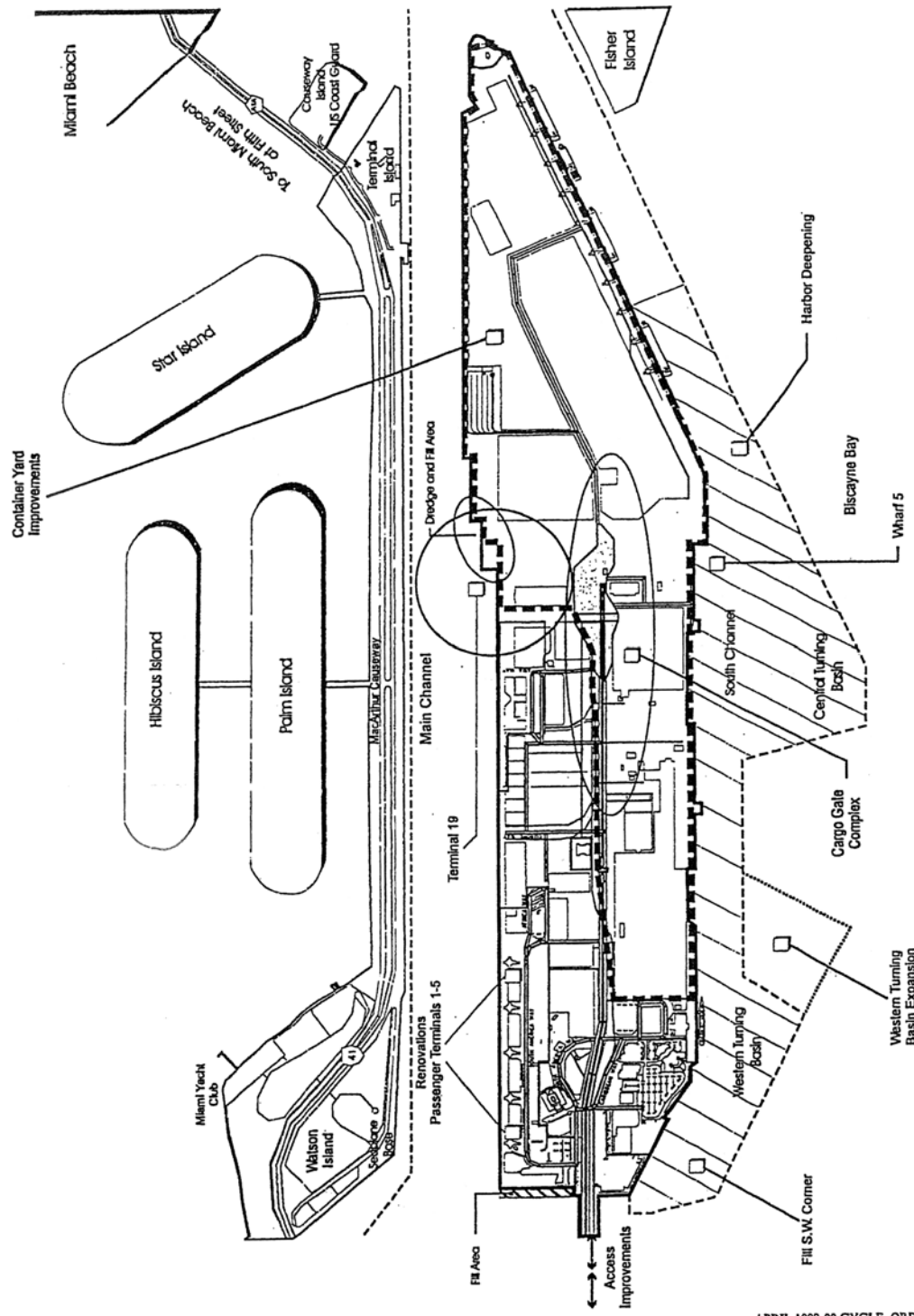
### **Policies**

- PM-11A. The port shall annually assess operations in light of existing and new local, state and federal security requirements. The port shall update its Florida Department of Law Enforcement (FDLE) approved Security Plan to address requirements as needed.
- PM-11B. The port shall seek funding from local, state and federal sources to address security issues related to the approved Security Plan. The port shall schedule capital items relating to security in the Capital Improvements Element (CIE); however, due to the rapidly evolving nature of security issues and the long timeframes necessary to modify the CIE, presence of security-related items in the CIE shall not be a requirement for a finding of consistency with this plan, so long as the port amends the CIE at the appropriate time to address the improvements, as needed. The port shall construct improvements and make operational modifications, as funding becomes available.
- PM-11C. The port shall ensure that new projects are designed and constructed in accordance with the approved Security Plan and applicable local, state and federal security laws.
- PM-11D. The port shall consider operational and infrastructure modification to accommodate military vessels and uses as warranted to fulfill security needs.
- PM-11E. In the event of an apparent conflict between port's security requirements (as defined by the port's approved Security Plan, local, state and federal law and/or agency directives) and other objectives in this Subelement, the security-based requirements shall prevail.

## **Future Port of Miami Facilities**

The Port of Miami is positioning itself to maintain, and build on, its leadership position among U.S. ports. Figure 1 illustrates the general locations of major Port projects during the fifteen-year planning period. The following list of projects generally outlines the expected program of development and intervals needed to implement the goals, objectives and policies of this subelement. Specific projects will be identified, prioritized and funded through the Seaport Department's Capital Improvement Plan, as implemented through the CDMP Capital Improvement Element.

<u>Project</u>	<u>Interval</u>
Acquisition of off-island Intermodal complex	Near Term
Access Improvements	Near Term/Long Term
Additional Gantry Cranes	Near Term/Long Term
Berthing Improvements	Near Term/Long Term
Increased Cargo Storage	Near Term/Long Term
Maximization of On-Island Cruise Facilities	Near Term/Long Term
Off-island Cruise Facilities (Maritime Park)	Near Term/Long Term
Channel Deepening	Near Term/Long Term
Intermodal Logistic Transfer Facility	Long Term
Support Infrastructure	Near Term/Long Term



**Figure 1**  
**5-Year Plan**

**Port of Miami**  
**2004 Master Development Plan**

Source: Bruno-Elias & Associates

**Note:** Off-island improvements, such as Maritime Park and Buena Vista Yard and access improvements are not shown. Locations are approximate and may be modified to reflect further study and alternatives review.

Landplan\PortMasterPlan\Final\_Report\Figure\_4.1.cdr

APRIL 1999-00 CYCLE, ORDINANCE 00-45, MARCH 28, 2000

## **Port of Miami Master Plan Monitoring Program**

The following information will be compiled and used in the preparation of the Evaluation and Appraisal Report (EAR):

### **Objective PM-1**

- Number of passengers on an annual basis
- Cruise related improvements made at the Port of Miami since 2003.
- Cruise related infrastructure improvements made since 2003.

### **Objective PM-2**

- Cargo tonnage on an annual basis.
- Cargo related improvements made at the Port of Miami since 2003.
- Cargo related infrastructure improvements made since 2003.

### **Objective PM-3**

- Number and type of facility maintenance and efficiency improvements made since 2003.

### **Objective PM-4**

- Assessment of the Port of Miami's environmental accomplishments and practices during the EAR reporting period.

### **Objective PM-5**

- Assessment of the Port of Miami's environmental accomplishments and practices during the EAR reporting period.

### **Objective PM-6**

- Number and condition of Port of Miami off-island expansion and related coordination activities.

### **Objective PM-7**

- Types of environmental permits and approvals issued during the EAR reporting period.

### **Objective PM-8**

- Assessment of the Port of Miami's expansion activities and joint-venture partnerships.

### **Objective PM-9**

- Number and condition of transportation projects affecting the Port of Miami during the EAR reporting period.

### **Objective PM-10**

- Infrastructure improvements made since 2003.

### **Objective PM-11**

- Compliance with applicable security requirements and plans.